

FIG. 1

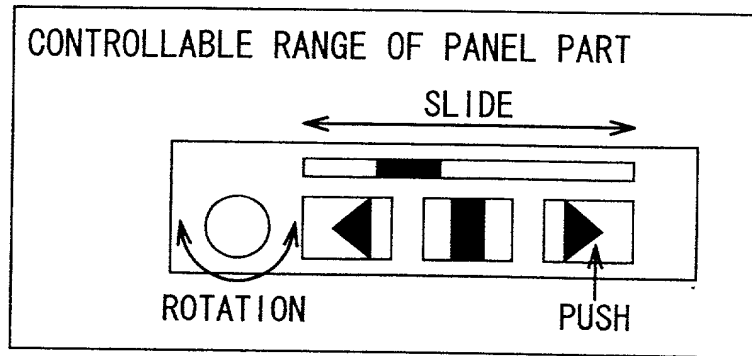


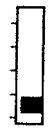
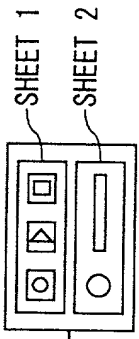


FIG. 2

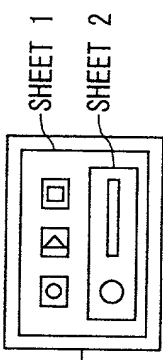
EXEMPLIFIED TABLE OF APPLIANCE PANEL INFORMATION

SHEET	PANEL ID	DISPLAY DATA	OPERATION ON GUI	COMMAND	OPERATION RANGE	LAYOUT
SHEET 1	B 1		"push"	"p l a y"	-	10 x 100
SHEET 1	B 2		"push"	"s t o p"	-	50 x 100
SHEET 1	V 1		"up" or "down"	"volume"	L0 ~ L50	90 x 130

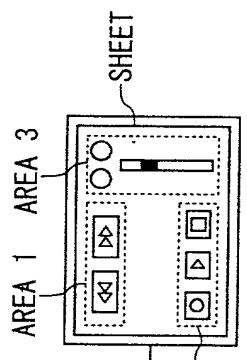
VTR 1 VTR 2 TV 1



\* A PLURALITY OF SHEETS  
MAY BE GIVEN TO ONE APPLIANCE.



\* ONE SHEET MAY BE ARRANGED  
ON ANOTHER SHEET.



\* "AREAS" MAY BE SET ON A SHEET  
TO HOLD LAYOUT INFORMATION.

FIG. 3

ACCEPTANCE OF INPUT FROM THE OUTSIDE : POSSIBLE

FIG. 4

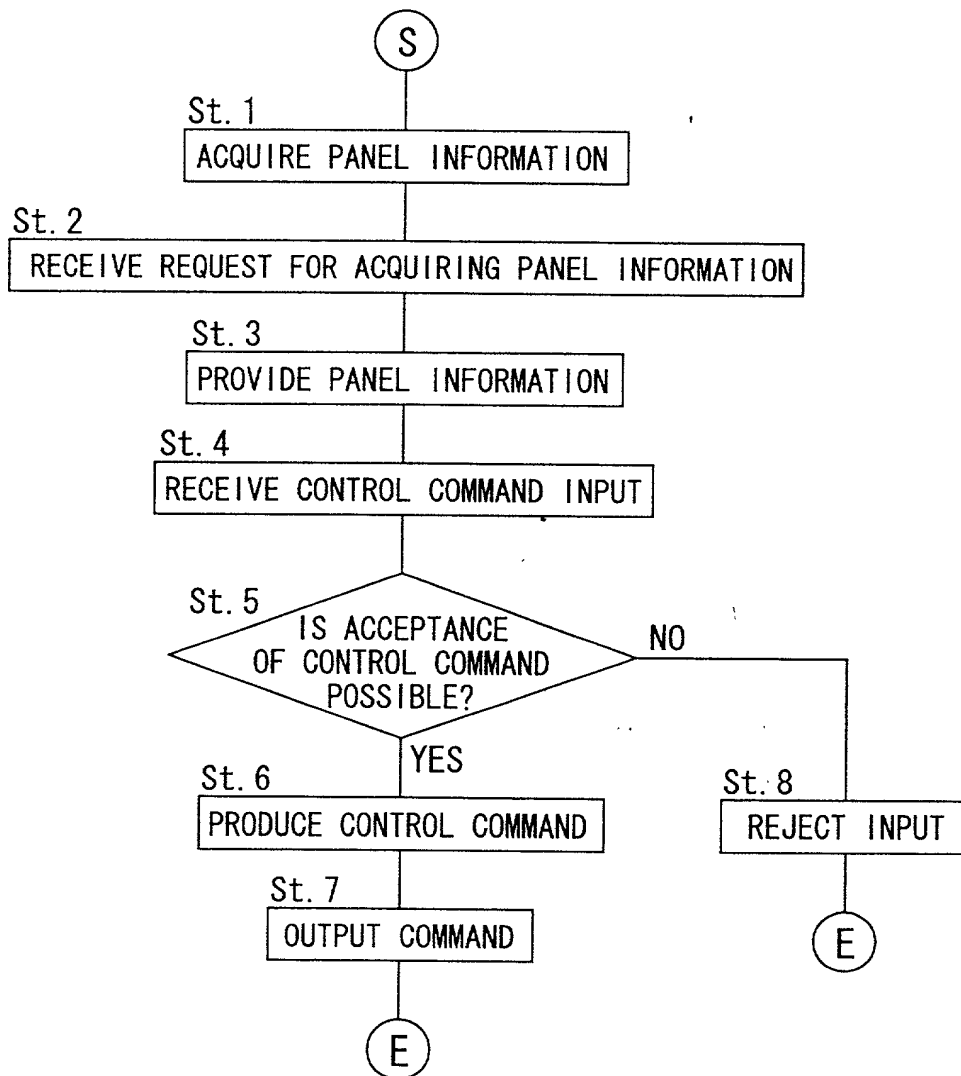


FIG. 5

TYPE OF INPUT: ACQUISITION OF PANEL INFORMATION  
OBJECTIVE APPLIANCE: VTR1

FIG. 6

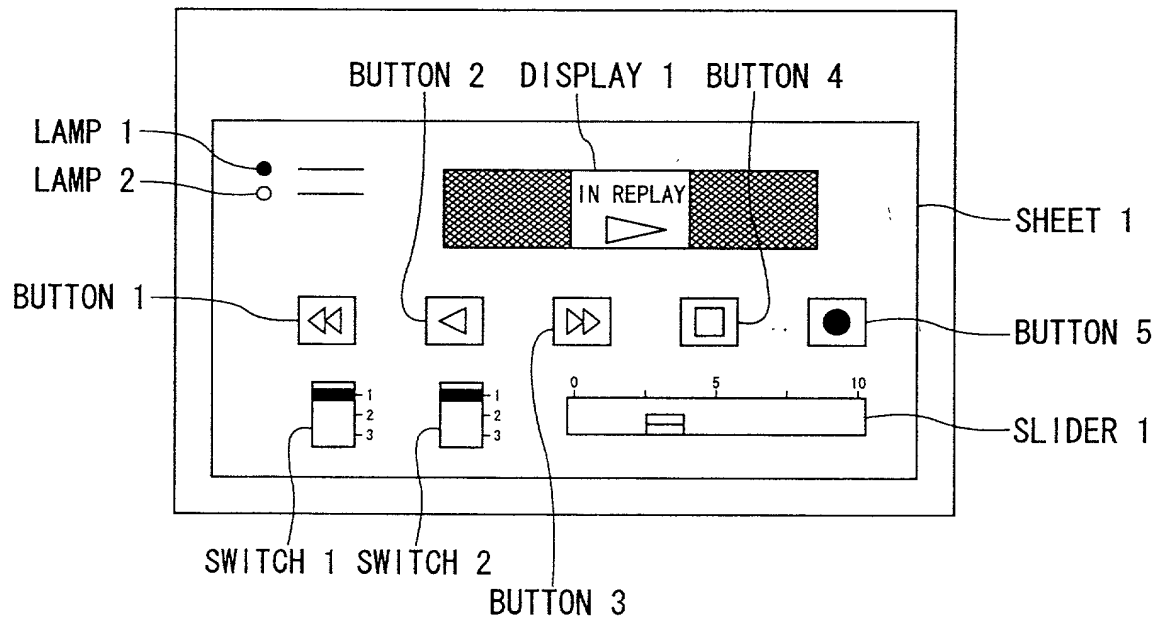


FIG. 7

TYPE OF INPUT: CONTROL COMMAND  
 OBJECTIVE APPLIANCE: VTR1  
 ID OF CONTROL-REQUESTING DEVICE: REMOTE CONTROL  
 TERMINAL A  
 PANEL ID: B1  
 OPERATION: "push"

FIG. 8

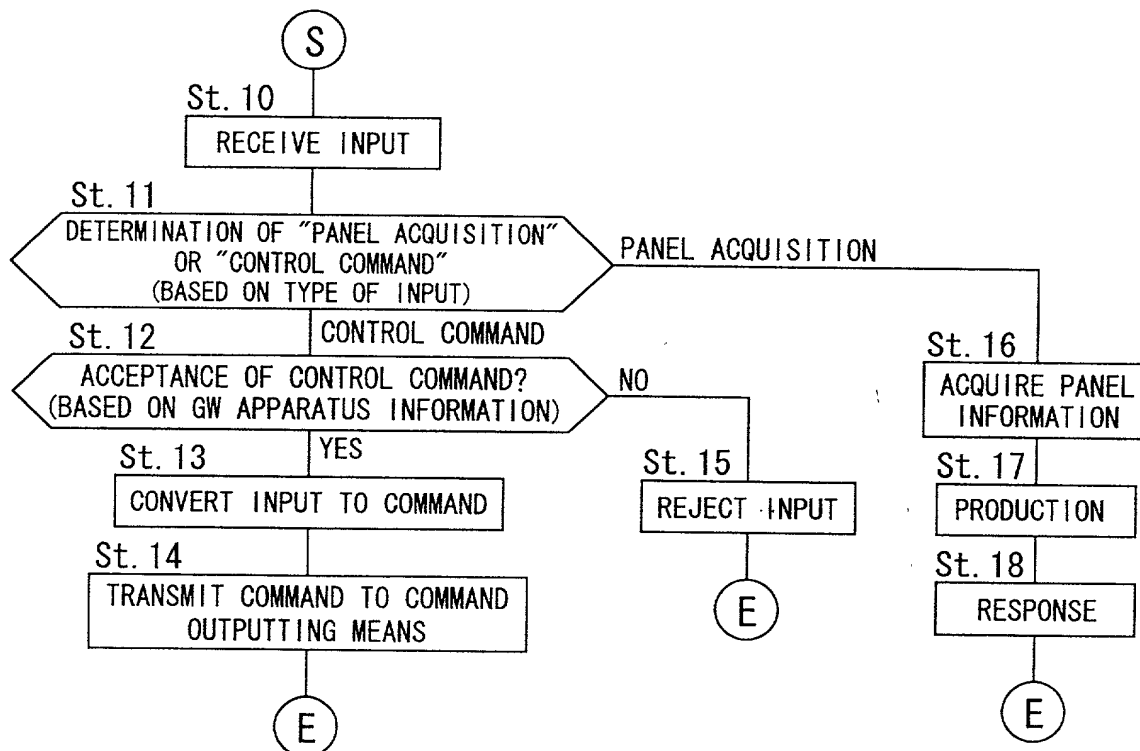


FIG. 9

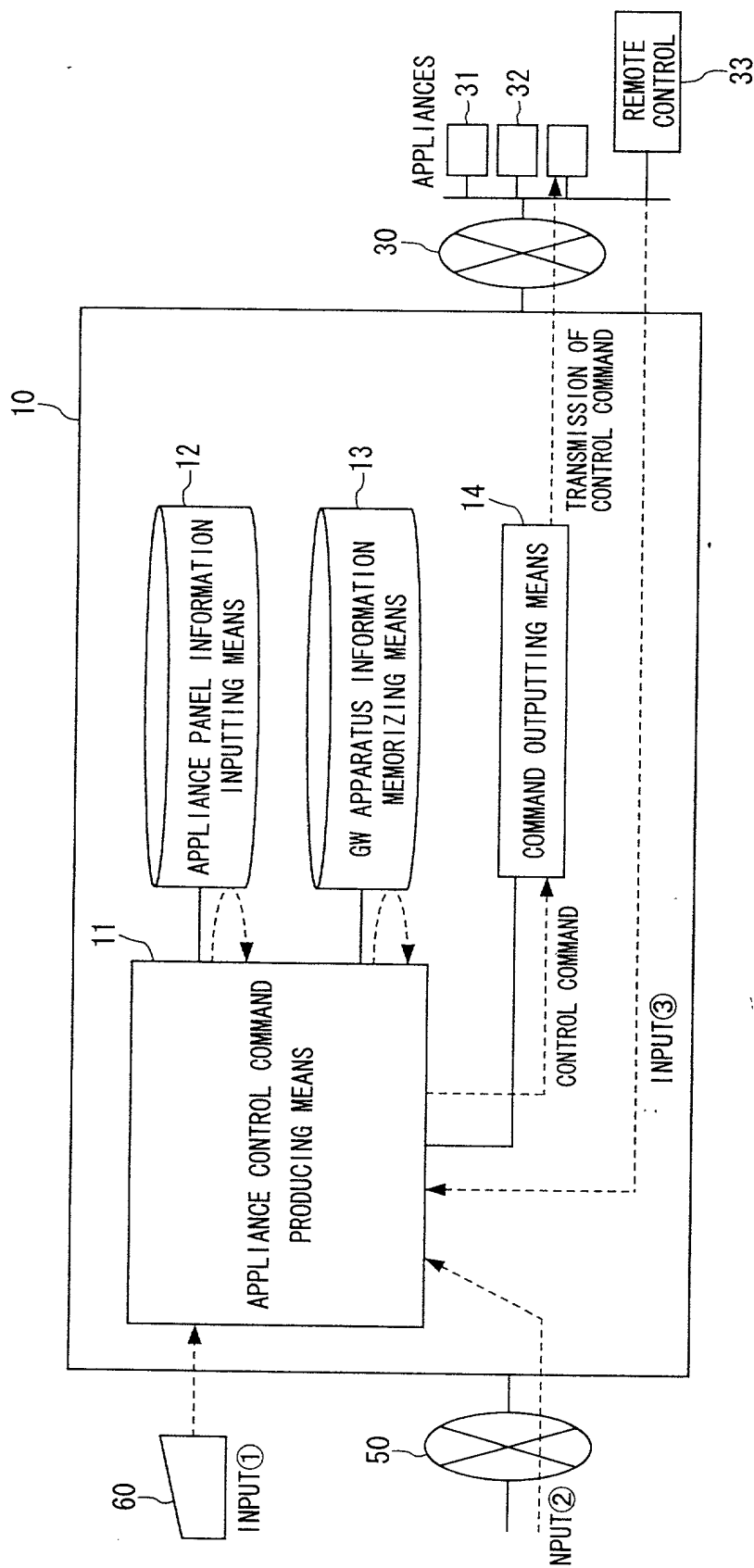


FIG. 10

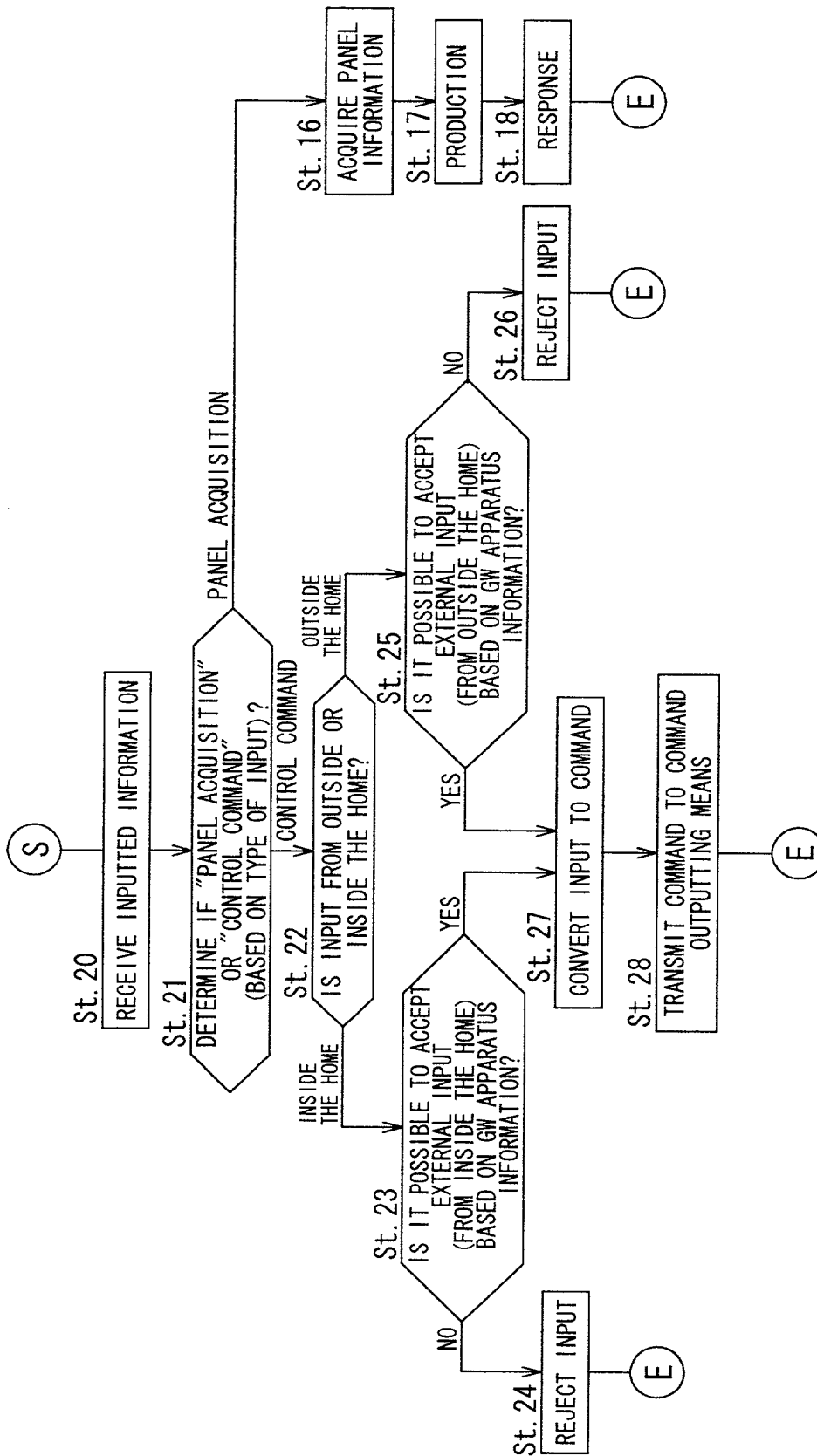


FIG. 11



A	ACCEPTANCE OF INPUT FROM OUTSIDE THE HOME: POSSIBLE
B	ACCEPTANCE OF INPUT FROM INSIDE THE HOME: POSSIBLE

FIG. 12A

A	ACCEPTANCE OF INPUT FROM OUTSIDE THE HOME: IMPOSSIBLE
B	ACCEPTANCE OF INPUT FROM INSIDE THE HOME: POSSIBLE

FIG. 12B

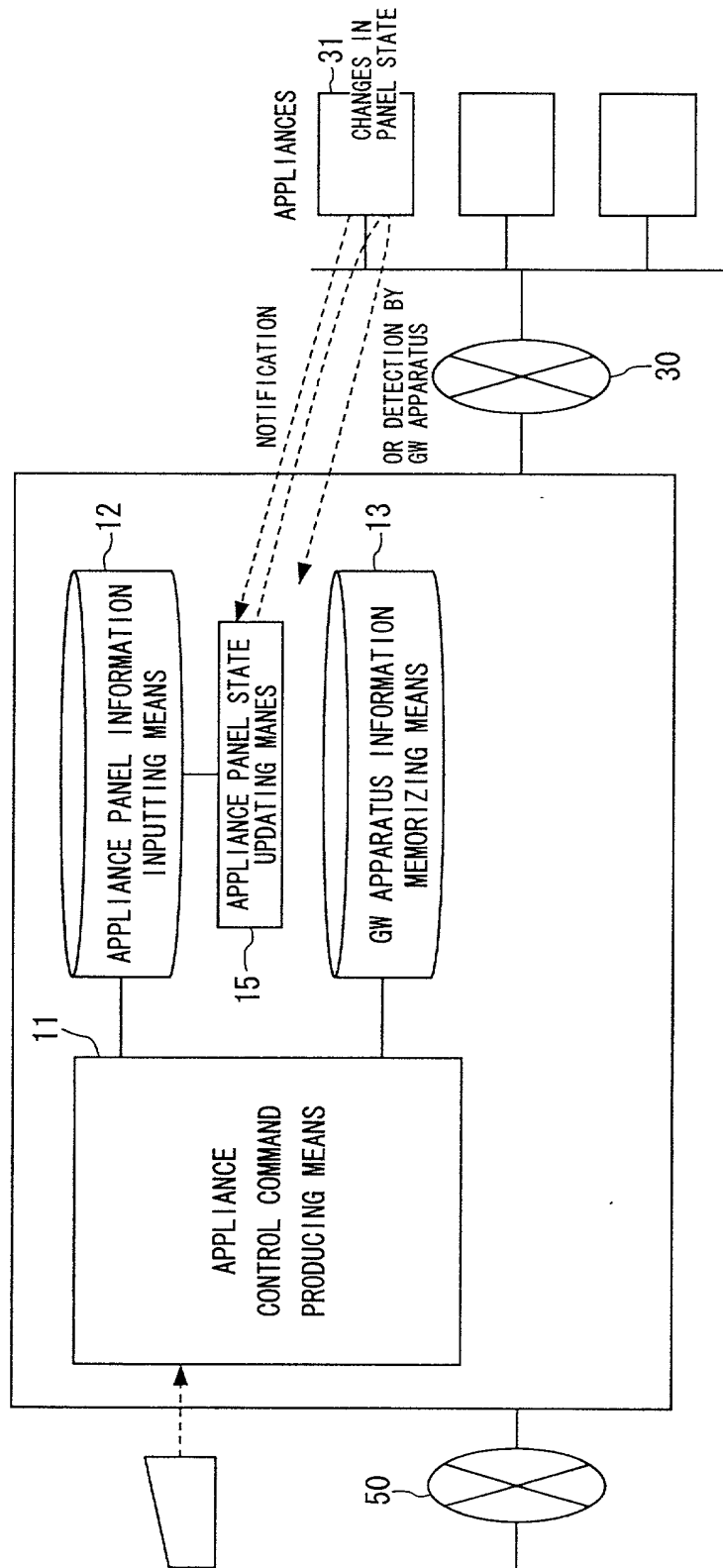


FIG. 13



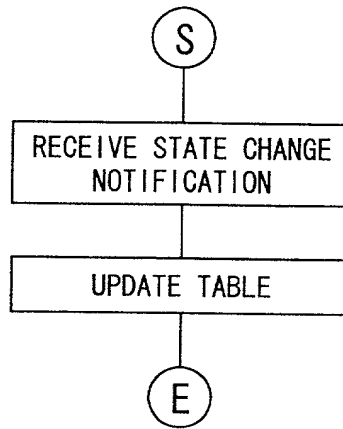


FIG. 15

TYPE OF NOTIFICATION: STATE CHANGE NOTIFICATION OBJECTIVE APPLIANCE: VTR1 PANEL ID: B1 FORMER STATE: "Normal" NEW STATE: "pushed"
---

FIG. 16

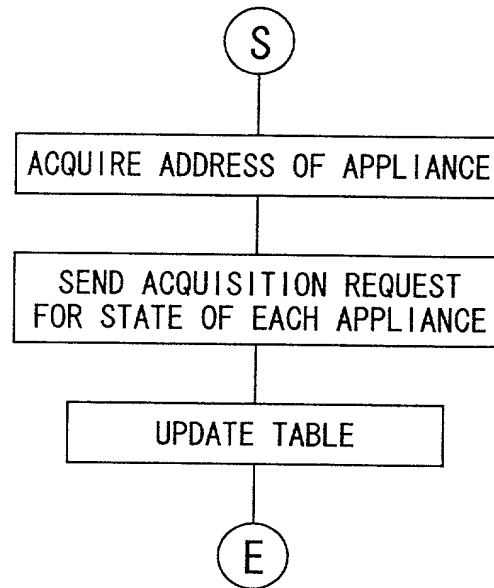


FIG. 17

SCREEN  
BEFORE CHANGE

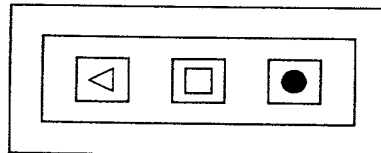
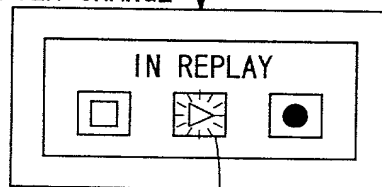


TABLE UPDATE PROCESSING  
FOR CHANGE IN STATE

SCREEN  
AFTER CHANGE



- \* BLINKING
- \* HIGHLIGHTED DISPLAY
- \* CHANGES IN COLOR
- \* DISPLAY BY CHARACTERS, ETC.

FIG. 18

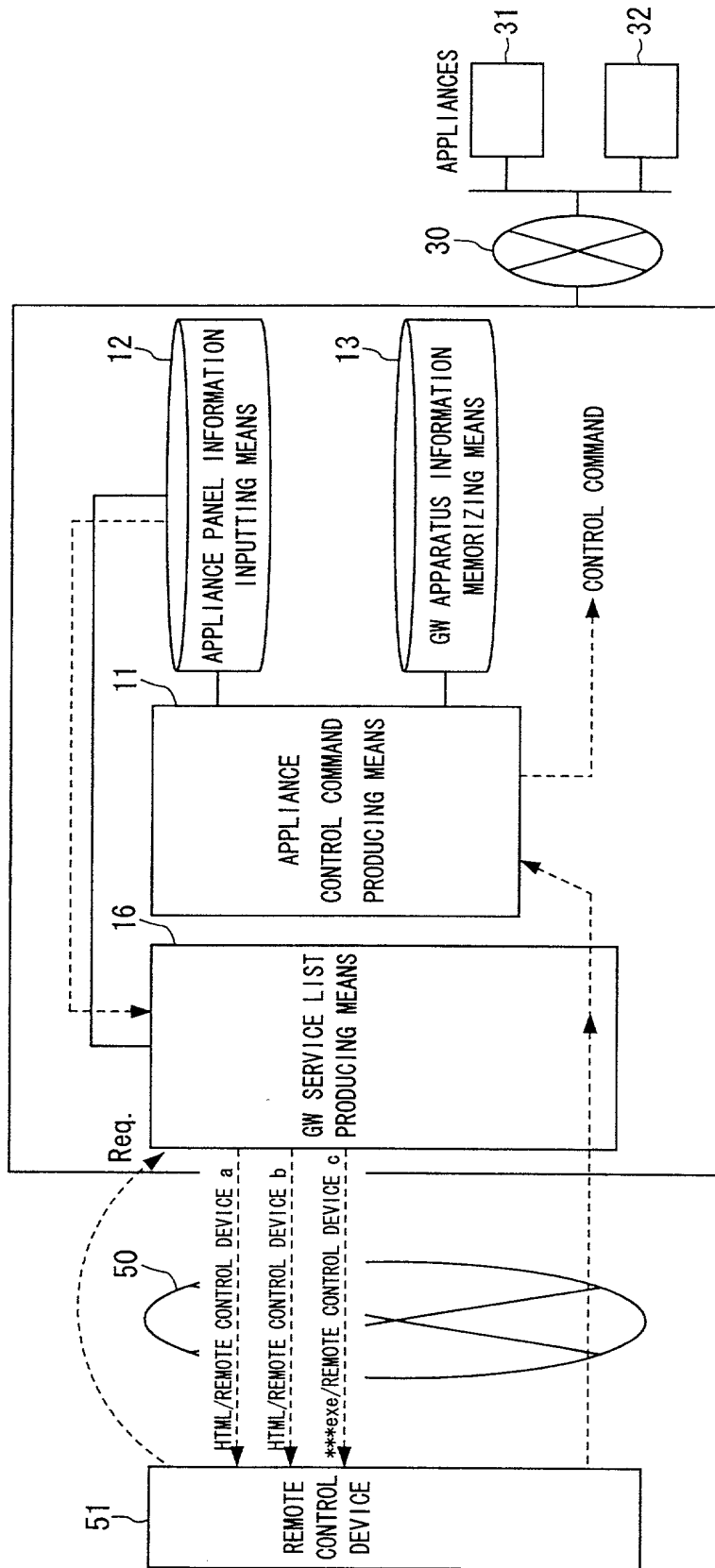


FIG. 19

CONTROL DEVICE ID: 001  
REQUEST: SERVICE LIST

FIG. 20

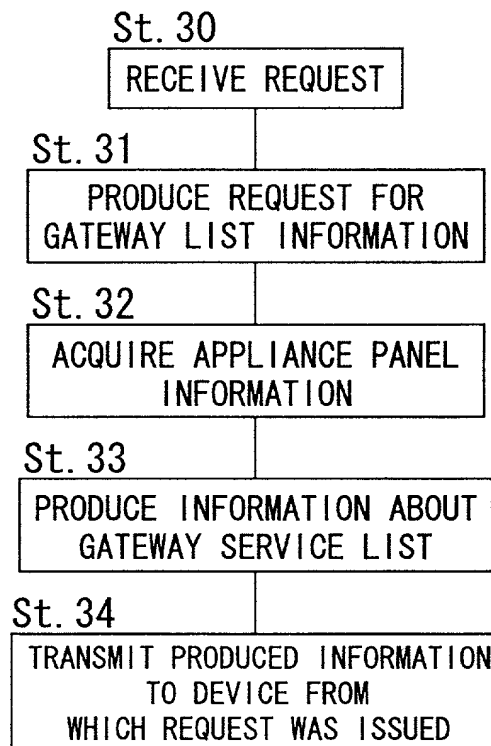


FIG. 21



VTR 1		
PANEL DATA	DISPLAY DATA	TYPE
B 1	 p l a y	BUTTON
B 1	 s t o p	BUTTON
⋮	⋮	⋮

FIG. 22



SHEET (1) (VTR 1)			
BUTTON 1	- DISPLAY DATA		- LAYOUT (100, 50) - COMMAND B1push
BUTTON 2	- DISPLAY DATA		- LAYOUT (100, 100) - COMMAND B2push

FIG. 23

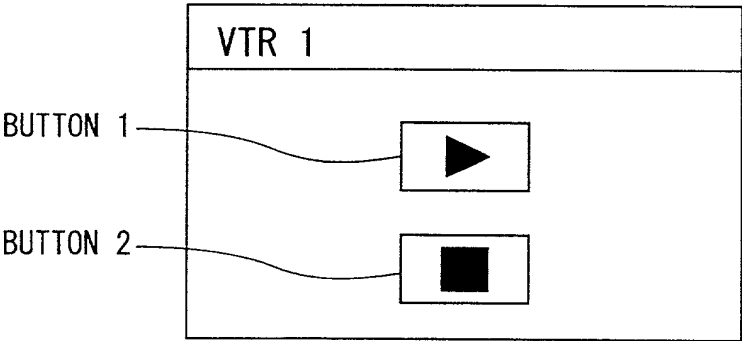


FIG. 24



```

<HTML>
<BODY>
...
<A href="http://www. .../VTR1/B1push.cgi">
  <src="play.gif"> </A>

<A href="http://www. .../VTR1/B2push.cgi">
  <src="stop.gif"> </A>
...
</BODY>
</HTML>

```

FIG. 25

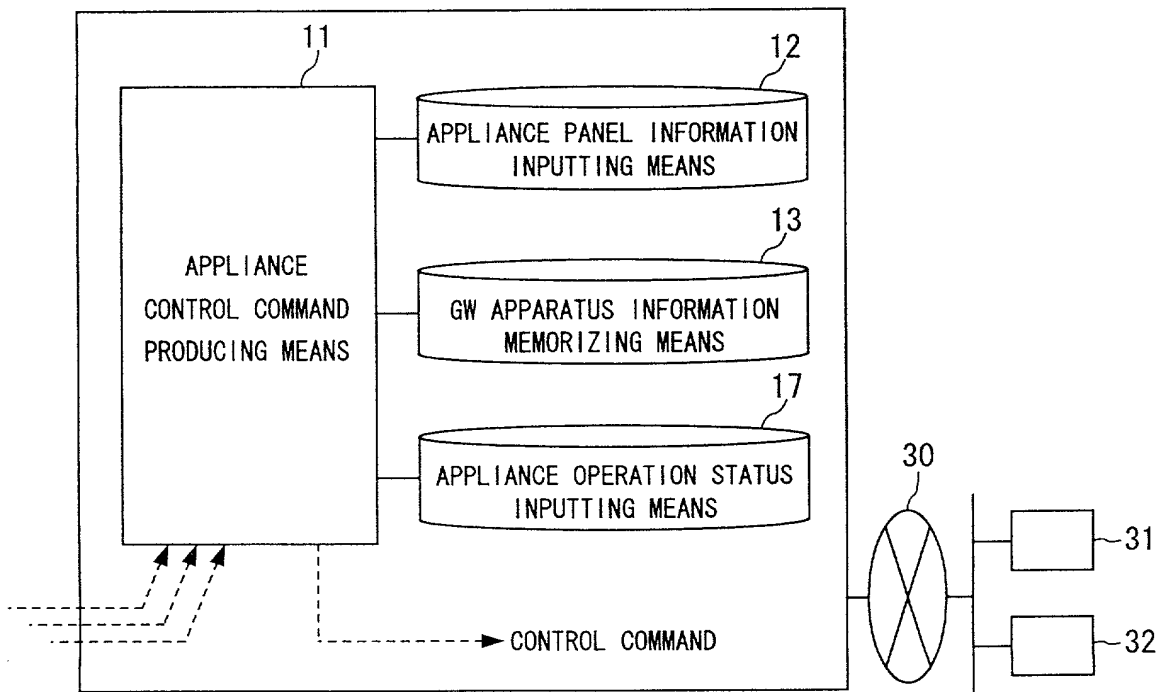


FIG. 26

APPLIANCE ID: VTR 1

CURRENT STATUS S2

STATUS BEFORE OPERATION	OPERATION	STATUS AFTER OPERATION
S1 (INITIAL STATUS)	B1 push	S2
	B3 push	S3
	B4 push	S4
S2 (IN REPLAY)	B2 push	S1
S3 (IN RECORDING)	B2 push	S1
S4 (RESERVATION OF RECORDING AND WAITING FOR CHANNEL INPUT)	CH1 TO 12 push	S5
S5 (RESERVATION OF RECORDING AND WAITING FOR TIME INPUT)	TIMER30, 60, 90 push	S6
⋮	⋮	⋮

TV1

AIR  
CONDITIONER

FIG. 27

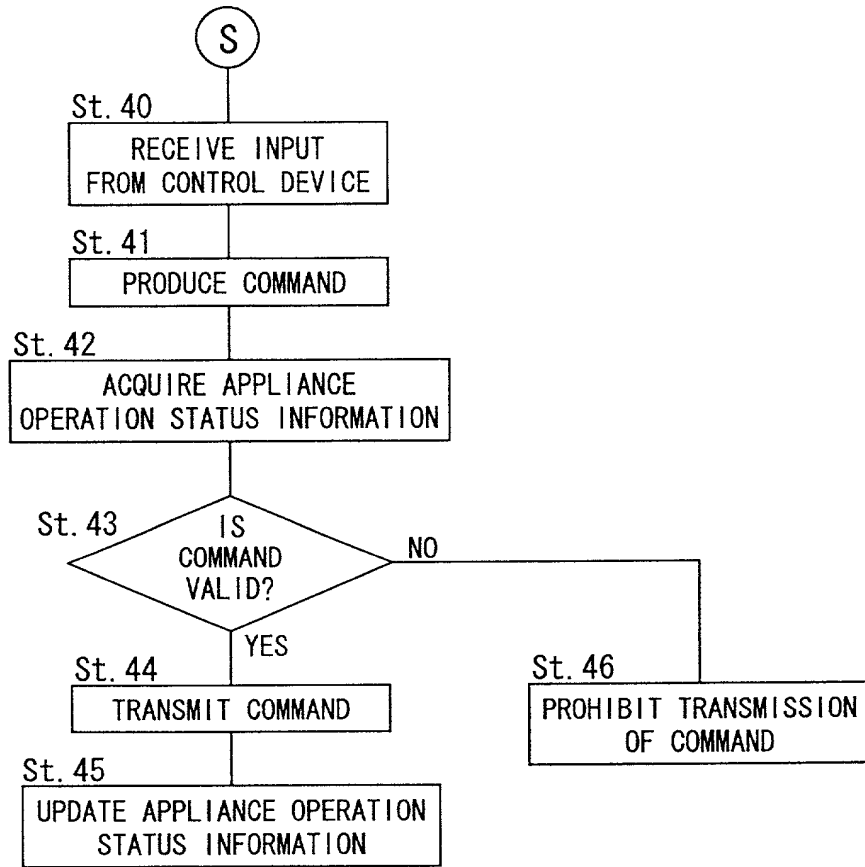


FIG. 28

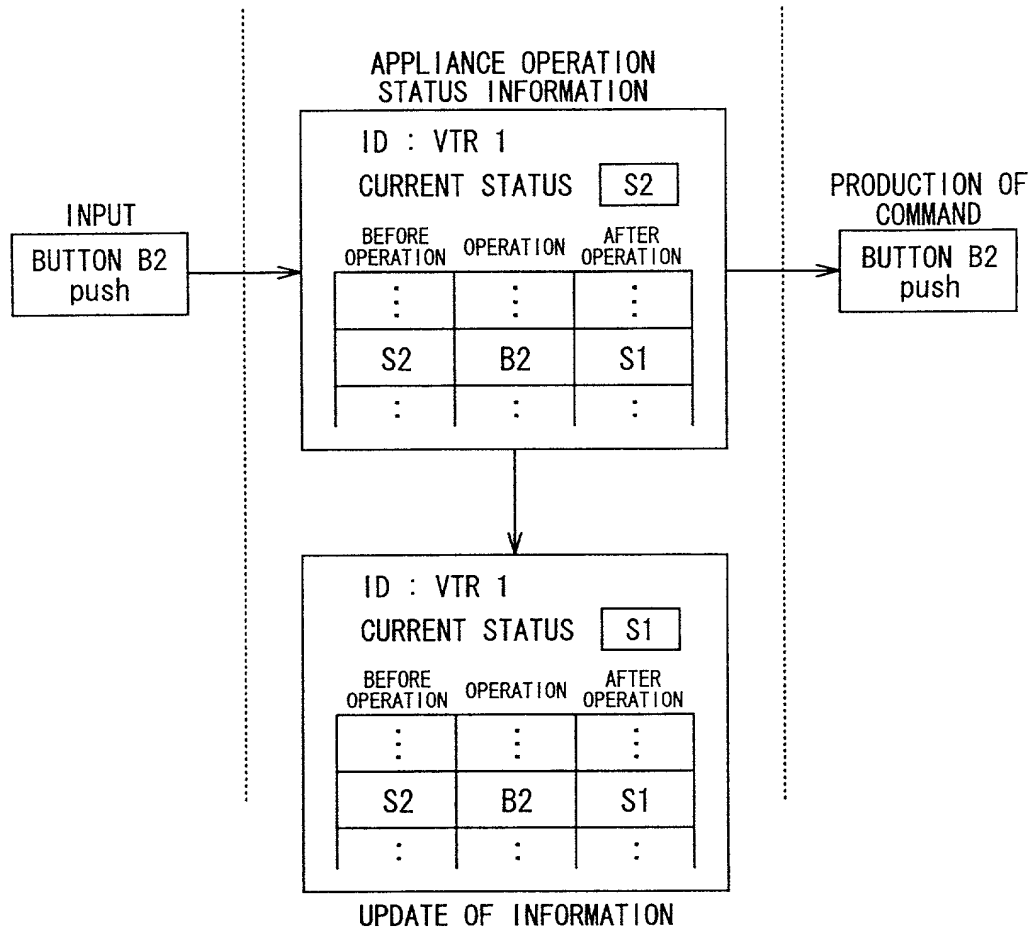


FIG. 29

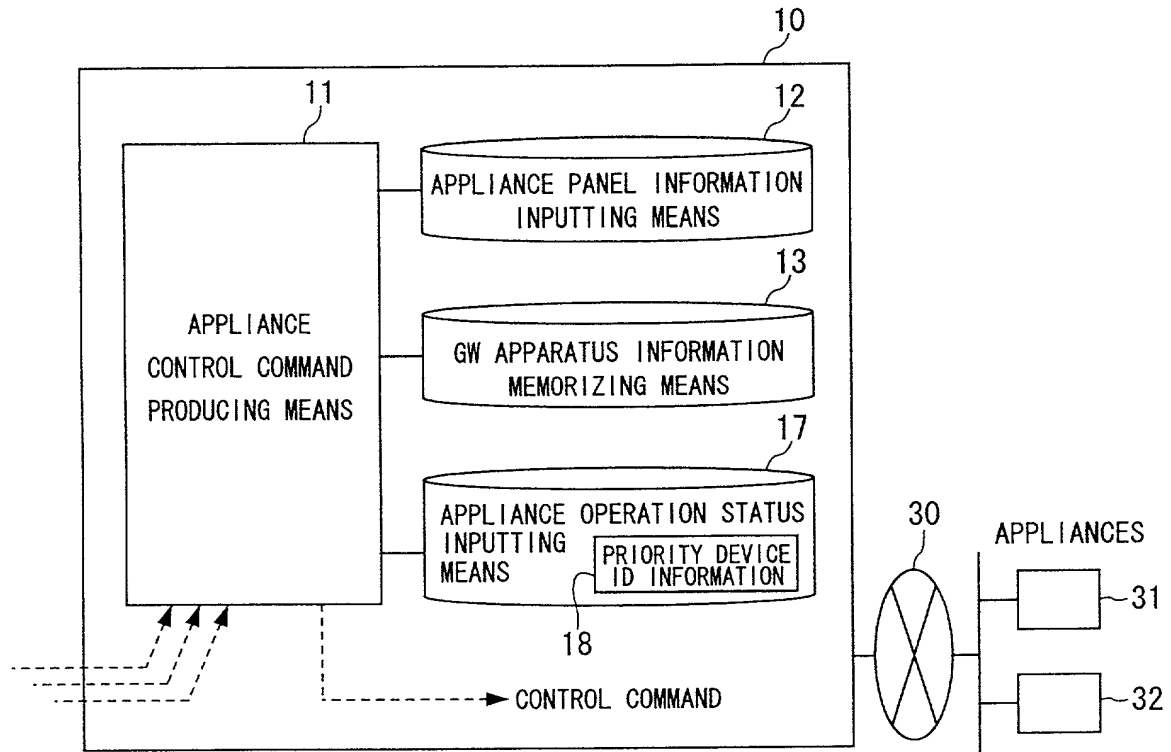


FIG. 30

APPLIANCE ID: VTR 1		
CURRENT STATUS	S2	PRIORITY DEVICE ID
* IS CONTINUED OPERATION STATUS		
BEFORE OPERATION	OPERATION	AFTER OPERATION
S1 (INITIAL STATUS)	B1 push	S2
	B3 push	S3
	B4 push	S4 *
S2 (IN REPLAY)	B2 push	S1
S3 (IN RECORDING)	B2 push	S1
S4 (RESERVATION OF RECORDING AND WAITING FOR CHANNEL INPUT)	CH1 push	S5 *
	:	
	CH12 push	
S5 (RESERVATION OF RECORDING AND WAITING FOR TIME INPUT)	TIMER30 push	S6
	TIMER60 push	
	:	
⋮	⋮	⋮

FIG. 31

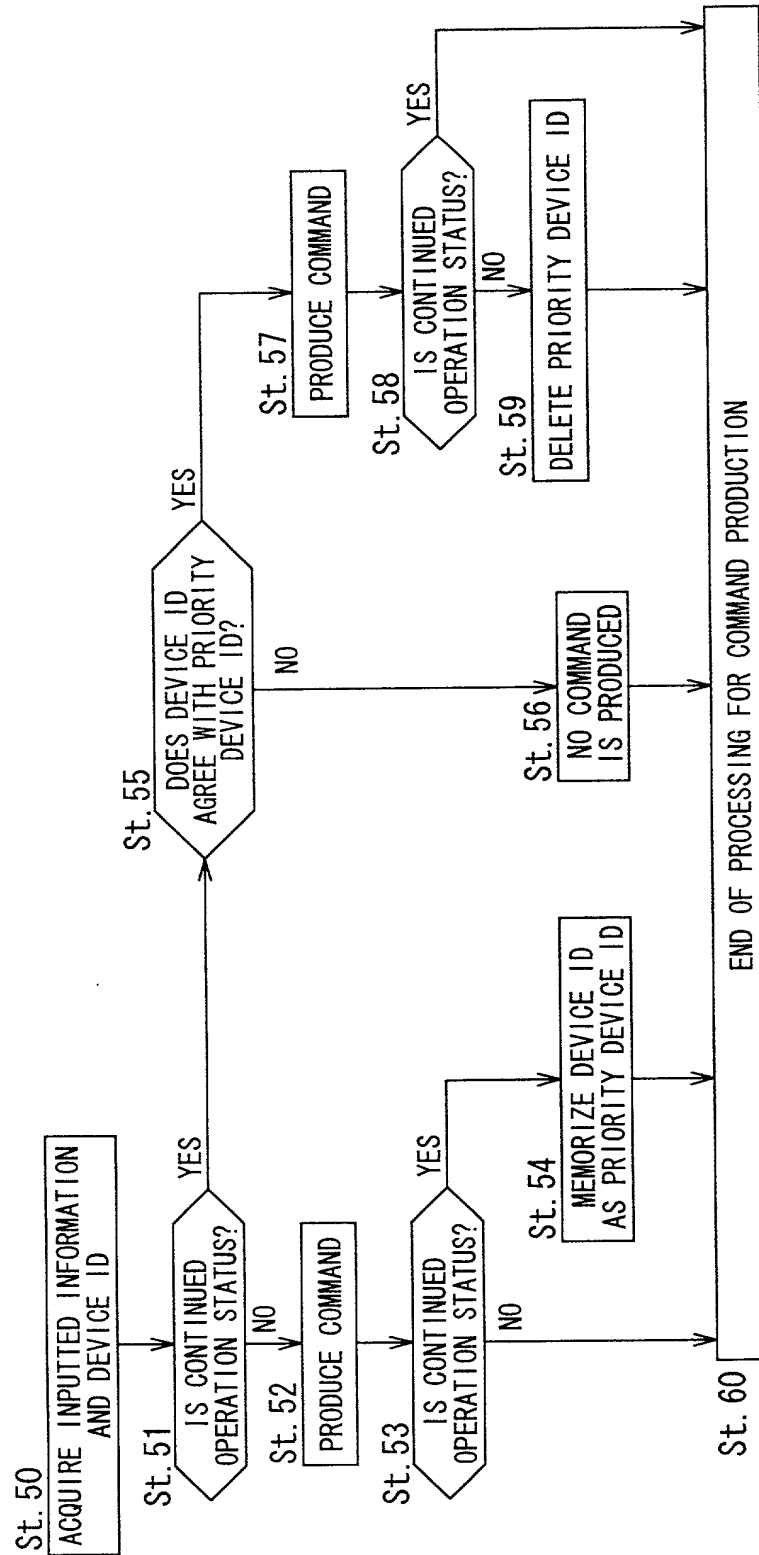


FIG. 32

PRIORITY DEVICE ID: 002

FIG. 33

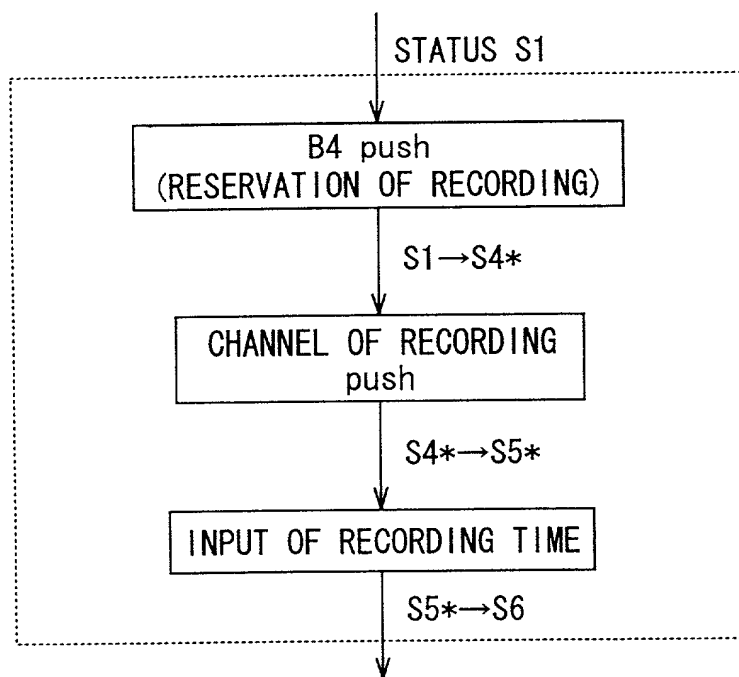


FIG. 34



FIG. 35A

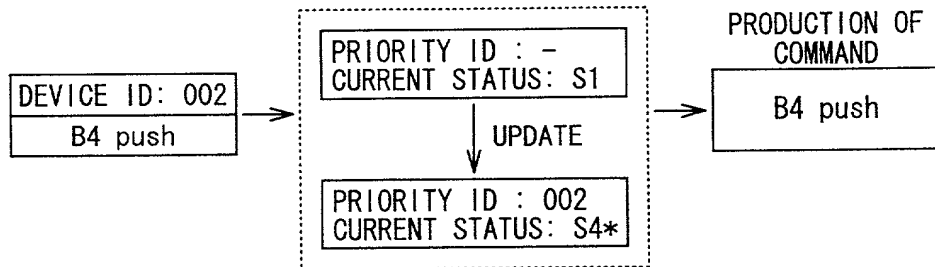


FIG. 35B

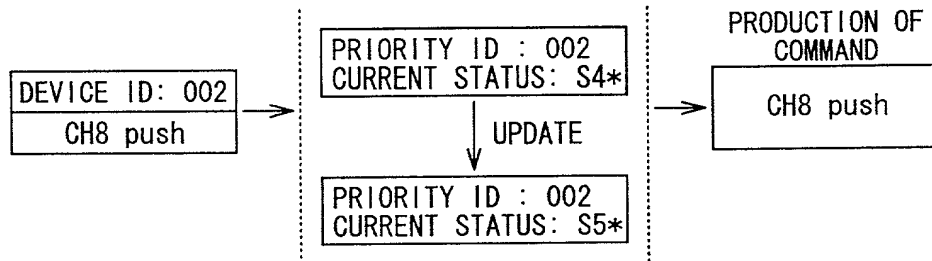


FIG. 35C

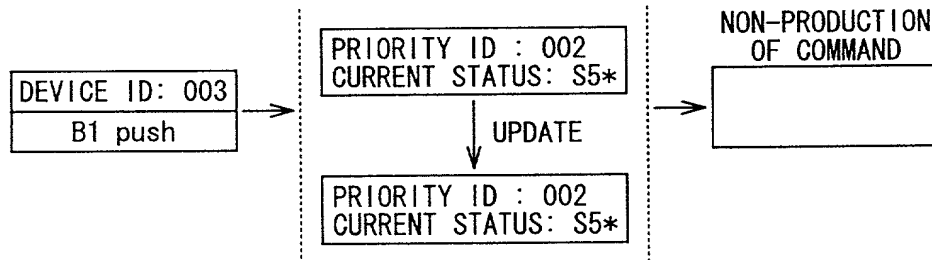
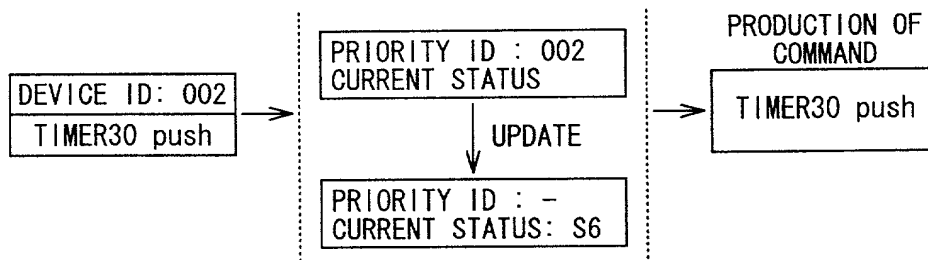


FIG. 35D



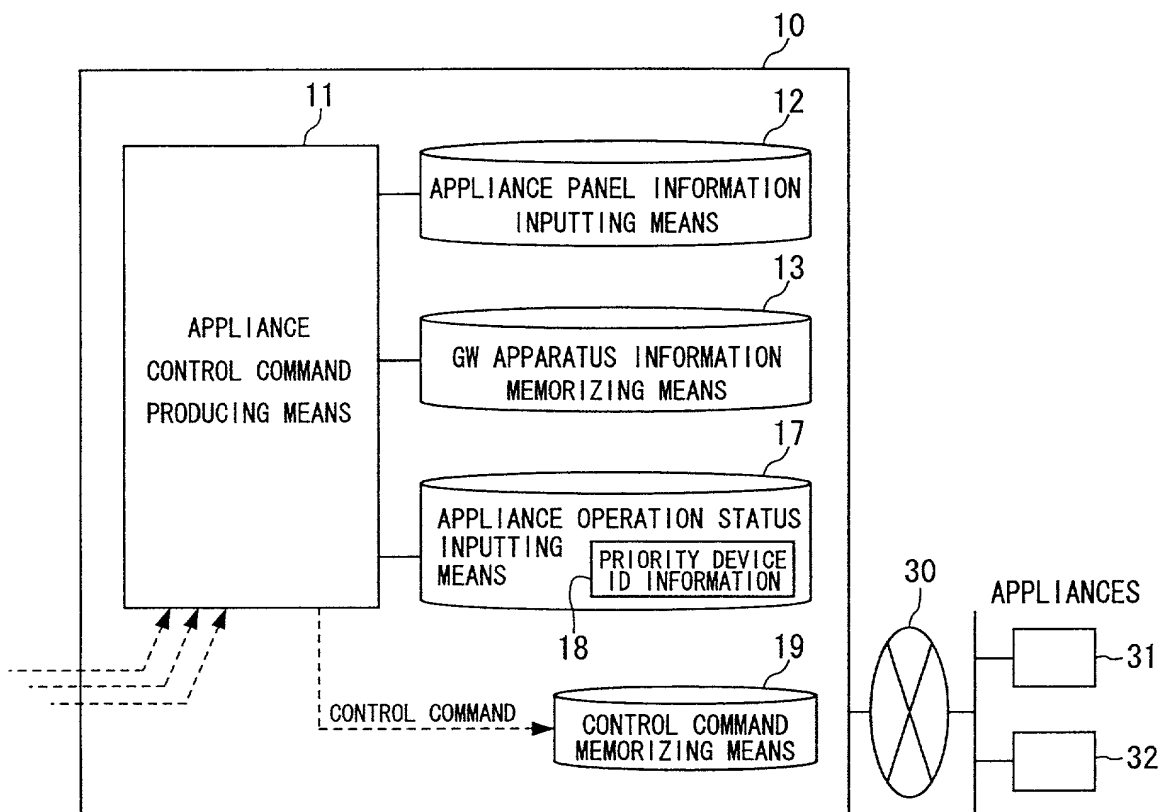


FIG. 36

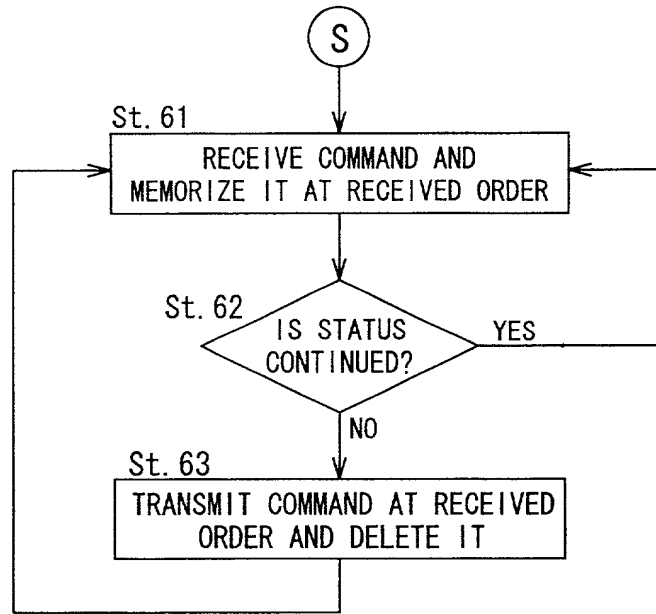


FIG. 37

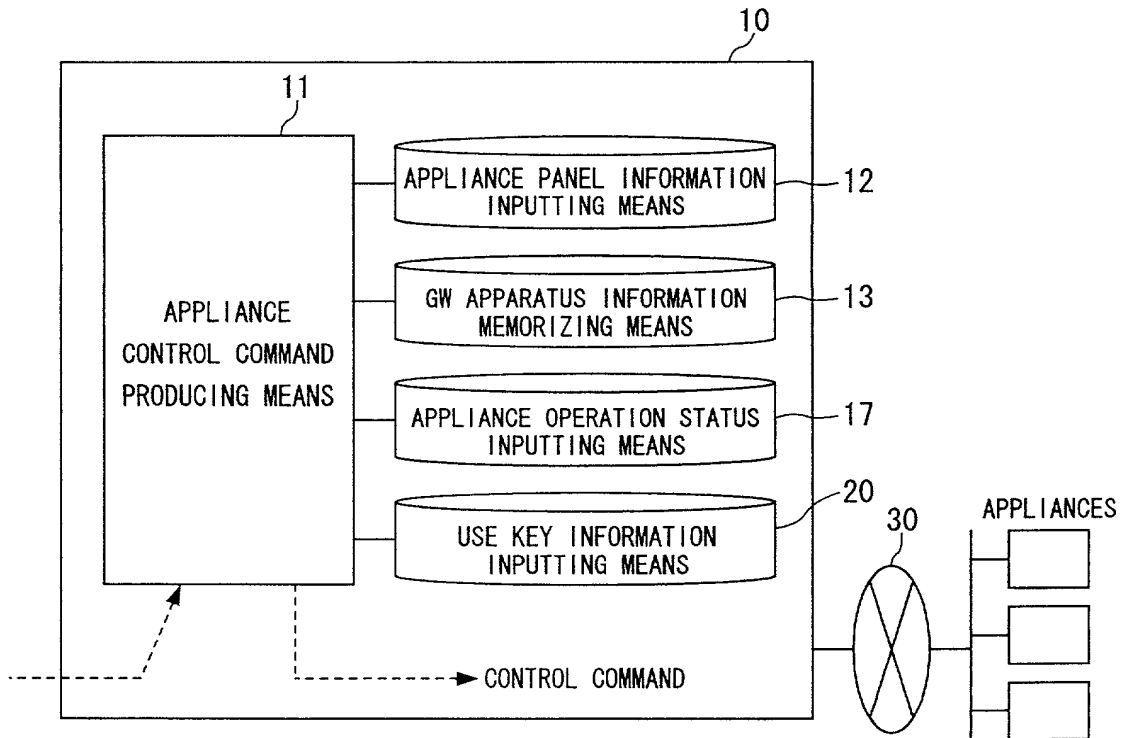


FIG. 38

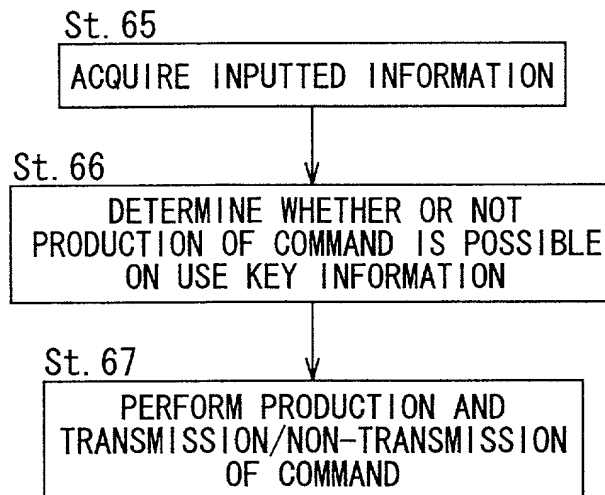


FIG. 39

ACCEPTABLE TIME ZONE DATA  
10:00~20:00

FIG. 40

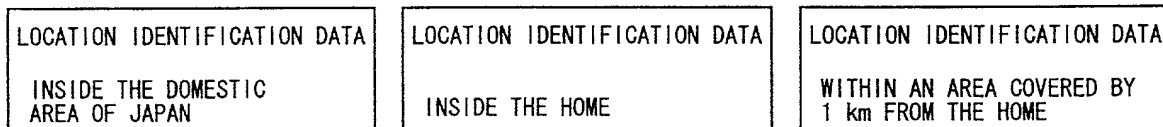


FIG. 41

DEVICE IDENTIFICATION DATA ID : 001 ~ 009
--

FIG. 42

USER IDENTIFICATION DATA ID : A , B , C , D
--

FIG. 43

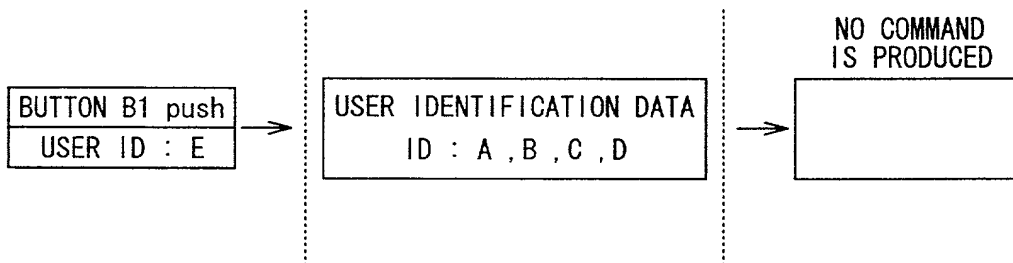


FIG. 44

1. The present invention relates to a video recording apparatus, and more particularly to a video recording apparatus capable of recording a video signal in a predetermined format.

2. In the prior art, a video recording apparatus has been known in which a video signal is recorded in a predetermined format by using a predetermined key.

3. However, in the prior art, the video signal is recorded in a predetermined format by using a predetermined key, and therefore, the video signal is recorded in a predetermined format by using a predetermined key.

4. In the present invention, a video recording apparatus is provided which is capable of recording a video signal in a predetermined format by using a predetermined key.

5. The present invention is directed to a video recording apparatus capable of recording a video signal in a predetermined format by using a predetermined key.

6. The present invention is directed to a video recording apparatus capable of recording a video signal in a predetermined format by using a predetermined key.

7. The present invention is directed to a video recording apparatus capable of recording a video signal in a predetermined format by using a predetermined key.

8. The present invention is directed to a video recording apparatus capable of recording a video signal in a predetermined format by using a predetermined key.

9. The present invention is directed to a video recording apparatus capable of recording a video signal in a predetermined format by using a predetermined key.

10. The present invention is directed to a video recording apparatus capable of recording a video signal in a predetermined format by using a predetermined key.

APPLIANCE ID: VTR 1

CURRENT STATUS S1

BEFORE OPERATION	OPERATION	AFTER OPERATION	USE KEY
S1 (INITIAL STATUS)	B1	S2	
	B3	S3	1
	B4	S4*	1
S2 (IN REPLAY)	B2	S1	
S3 (IN RECORDING)	B2	S1	
S4* (RESERVATION OF RECORDING AND WAITING FOR CHANNEL INPUT)			

KEY 1  
USER ID : 001 TO 004

FIG. 45

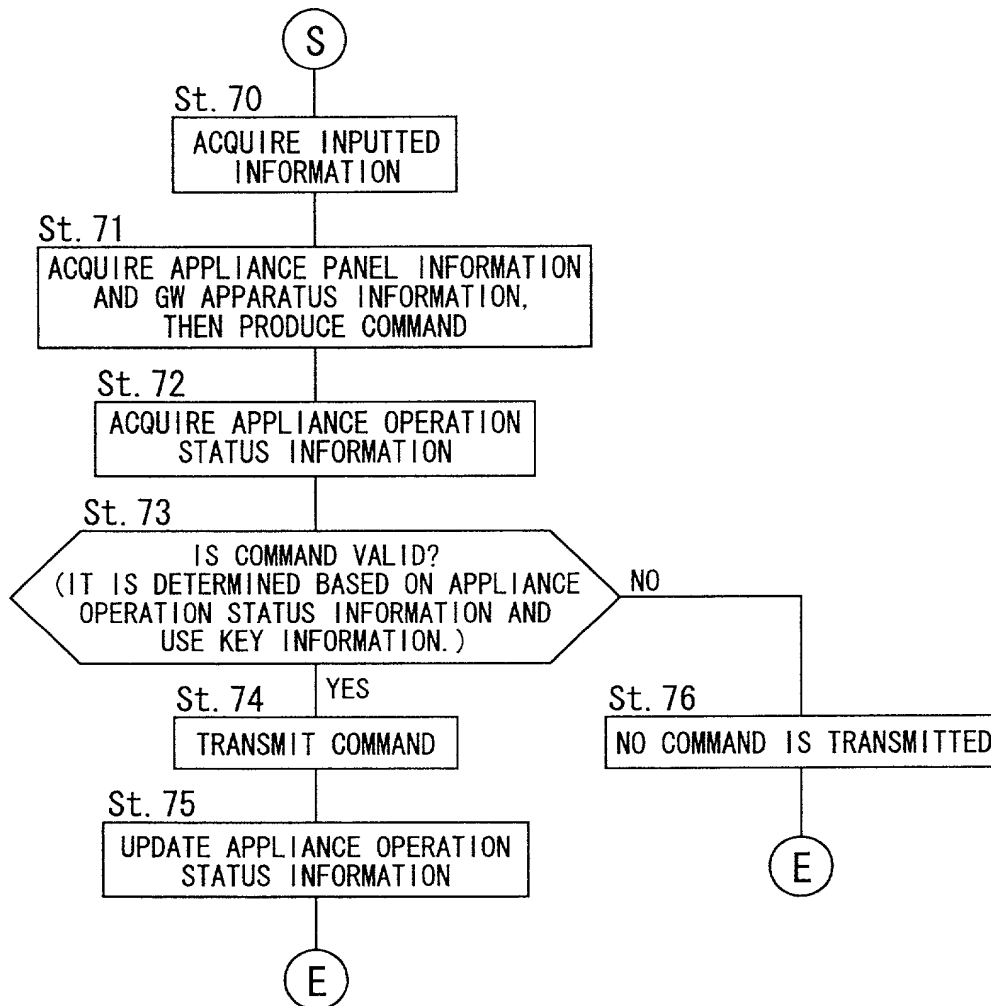


FIG. 46

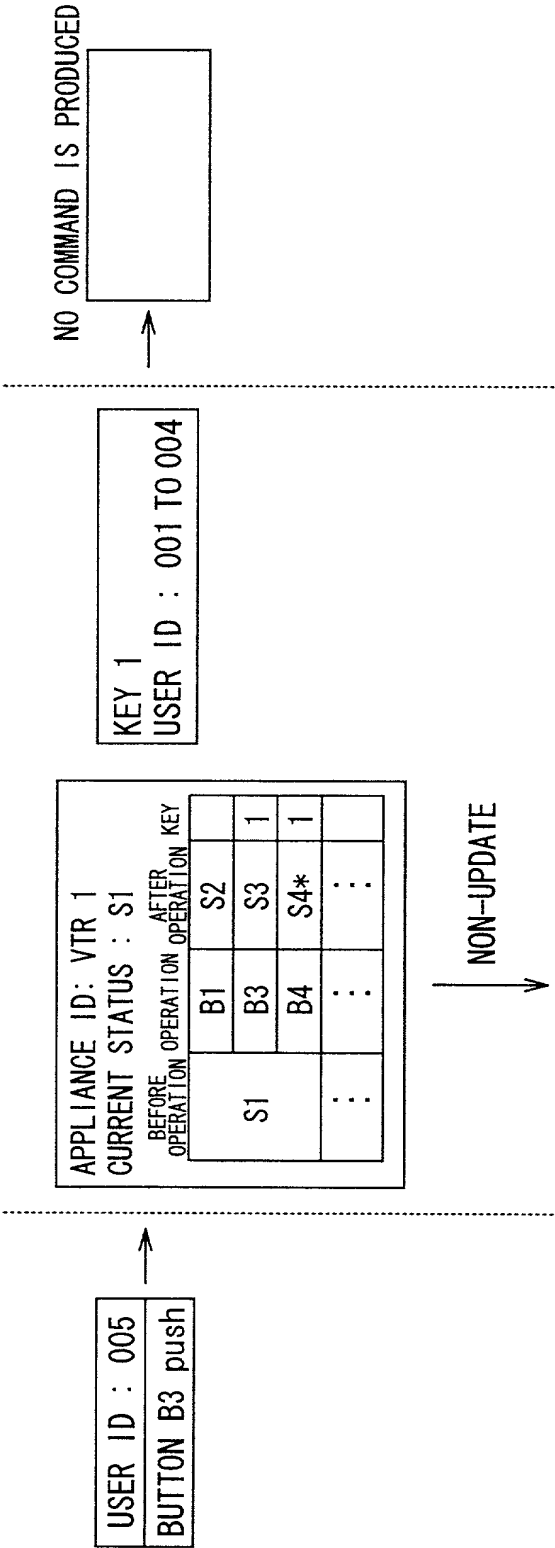


FIG. 47



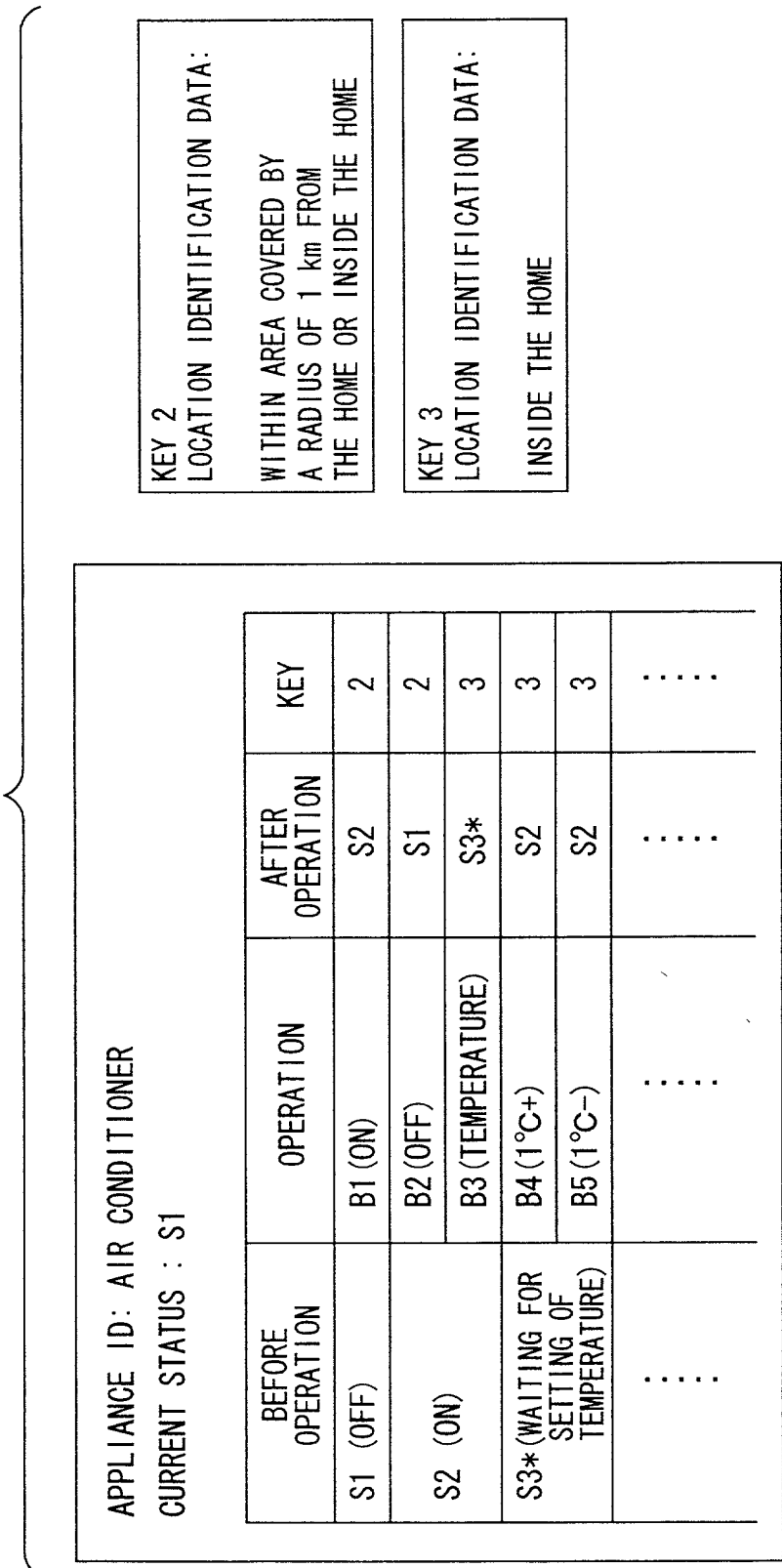


FIG. 48

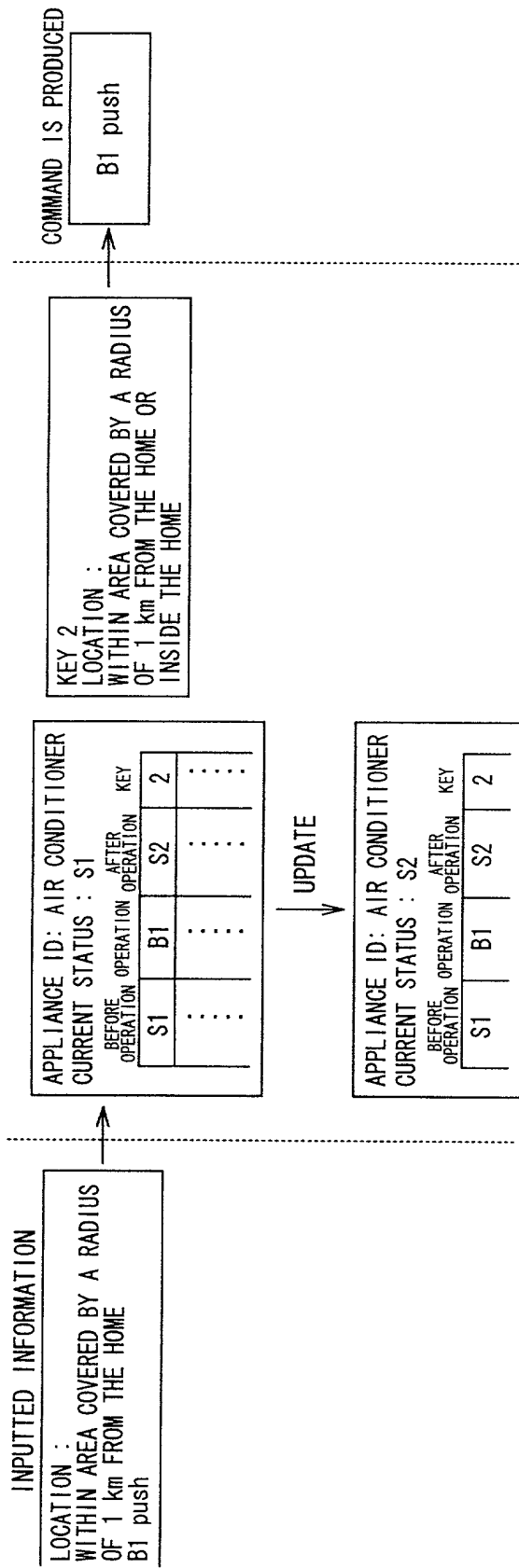


FIG. 49A

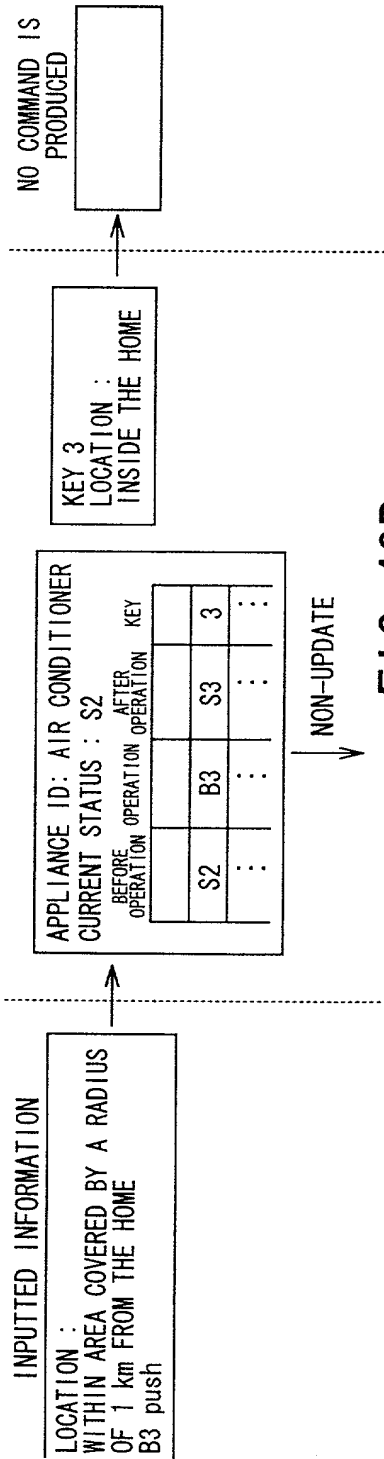


FIG. 49B



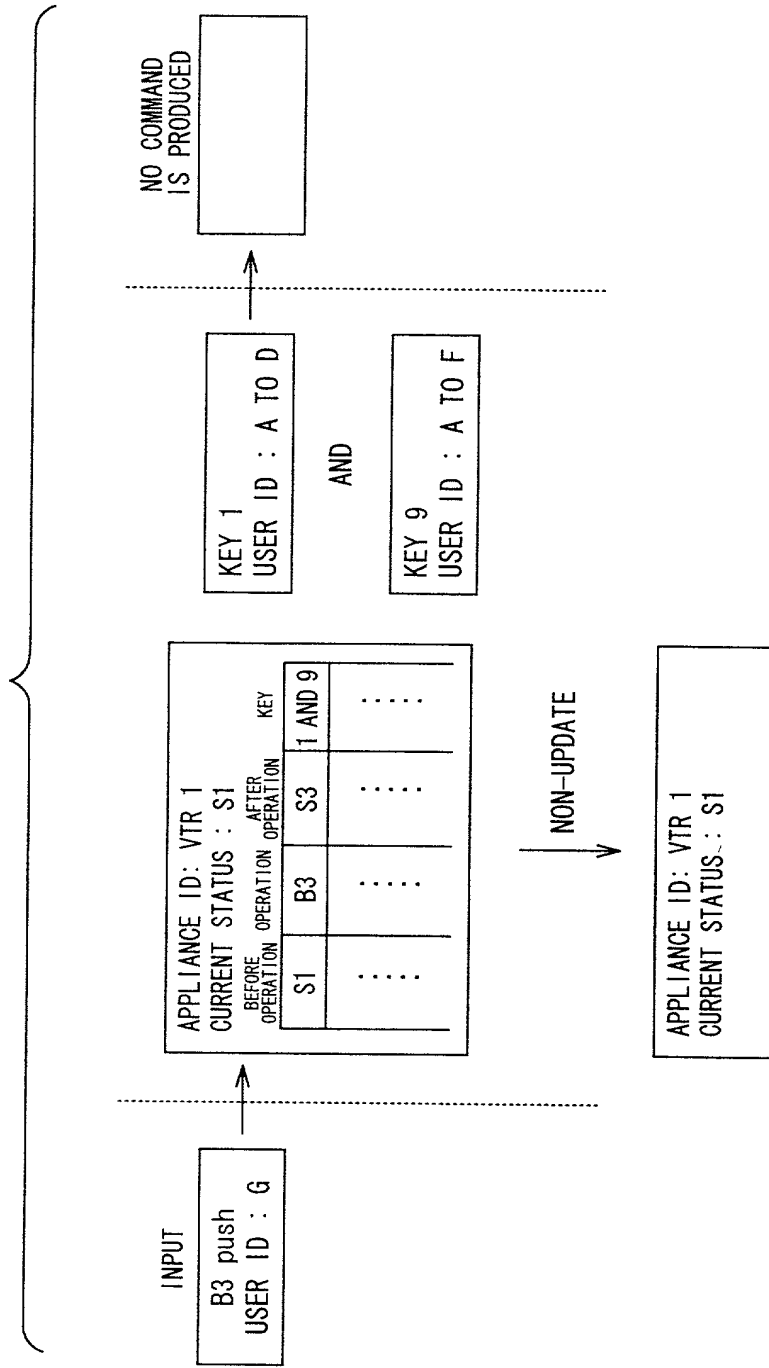


FIG. 51

FIG. 52 is a flowchart illustrating a process for updating the current status of an appliance (VTR 1) based on user input and key presses. The process starts with an input box labeled "INPUT" containing "TIMER150 push" and "USER ID : D". This input leads to a decision point (dashed line). If the input is valid, the process proceeds to a box labeled "APPLIANCE ID: VTR 1" and "CURRENT STATUS : S5\*", which contains a table with columns "BEFORE OPERATION", "AFTER OPERATION", and "KEY". The table shows "S5\*" in the "BEFORE OPERATION" column, "TIMER 150" in the "AFTER OPERATION" column, and "S6" in the "KEY" column. Below this, there are three rows of colons (:). This box then leads to a "NON-UPDATE" step, which leads to a box labeled "APPLIANCE ID: VTR 1" and "CURRENT STATUS : S5\*".

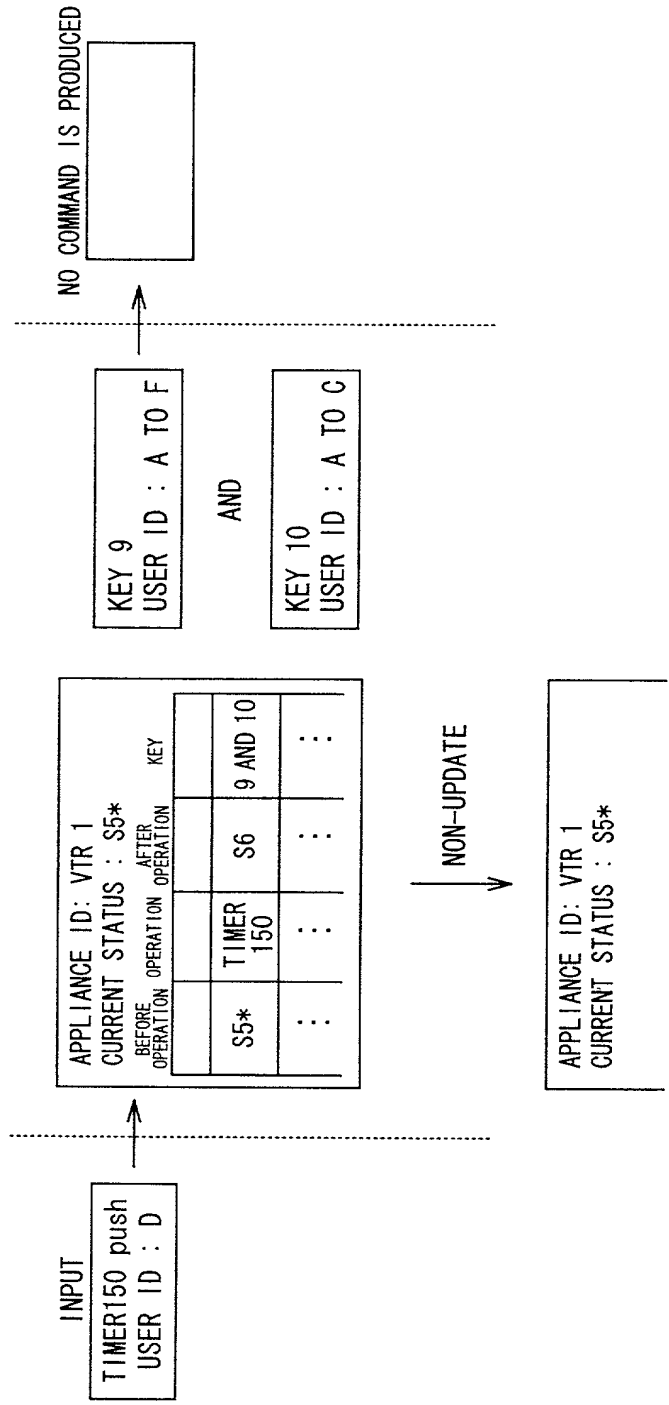


FIG. 52

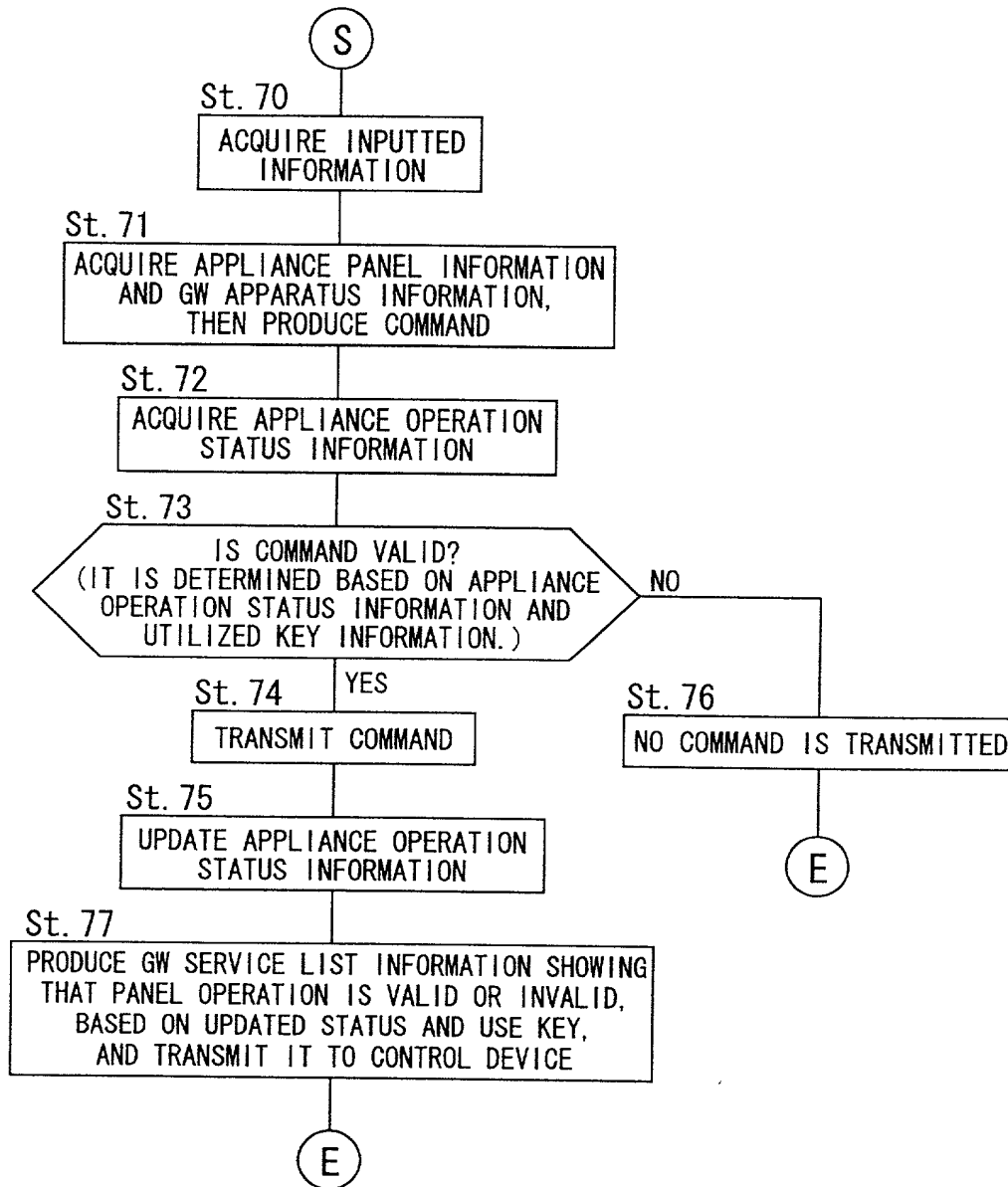


FIG. 53

FIG. 54A

APPLIANCE ID: AIR CONDITIONER  
STATUS : S2

BEFORE OPERATION	OPERATION	AFTER OPERATION	KEY
S2	B2	S1	2
	B3	S3*	3
:	:	:	:

KEY 2

TERMINAL ID: 001~004  
LOCATION : WITHIN AREA  
COVERED BY A RADIUS  
OF 1 km FROM THE HOME OR  
INSIDE THE HOME

KEY 3

TERMINAL ID: 001~004  
LOCATION :  
INSIDE THE HOME



FOR TERMINAL 001 GATEWAY SERVICE LIST

SHEET (AIR CONDITIONER)

{ B1 -DISPLAY DATA	ON (INVALID)
B2 -DISPLAY DATA	OFF -COMMAND B2 push
B3 -DISPLAY DATA	TEMPERATURE (INVALID)
B4 -DISPLAY DATA	+ (INVALID)
B5 -DISPLAY DATA	- (INVALID)
STATUS ON }	

FIG. 54B

FOR TERMINAL 002 GATEWAY SERVICE LIST

SHEET (AIR CONDITIONER)

{ B1 -DISPLAY DATA	ON (INVALID)
B2 -DISPLAY DATA	OFF -COMMAND B2 push
B3 -DISPLAY DATA	TEMPERATURE -COMMAND B3 push
B4 -DISPLAY DATA	+ (INVALID)
B5 -DISPLAY DATA	- (INVALID)
STATUS ON }	

FIG. 54C

WITHIN AREA COVERED BY  
A RADIUS OF 1 km FROM THE HONE

TERMINAL : 001

B1	ON (INVALID)	B4	+ (INVALID)
		B3	TEMPERATURE (INVALID)
B2	OFF	B5	- (INVALID)
CURRENT ON			

FIG. 55A

INSIDE THE HONE

TERMINAL : 002

B1	ON (INVALID)	B4	+ (INVALID)
		B3	TEMPERATURE
B2	OFF	B5	- (INVALID)
CURRENT ON			

FIG. 55B



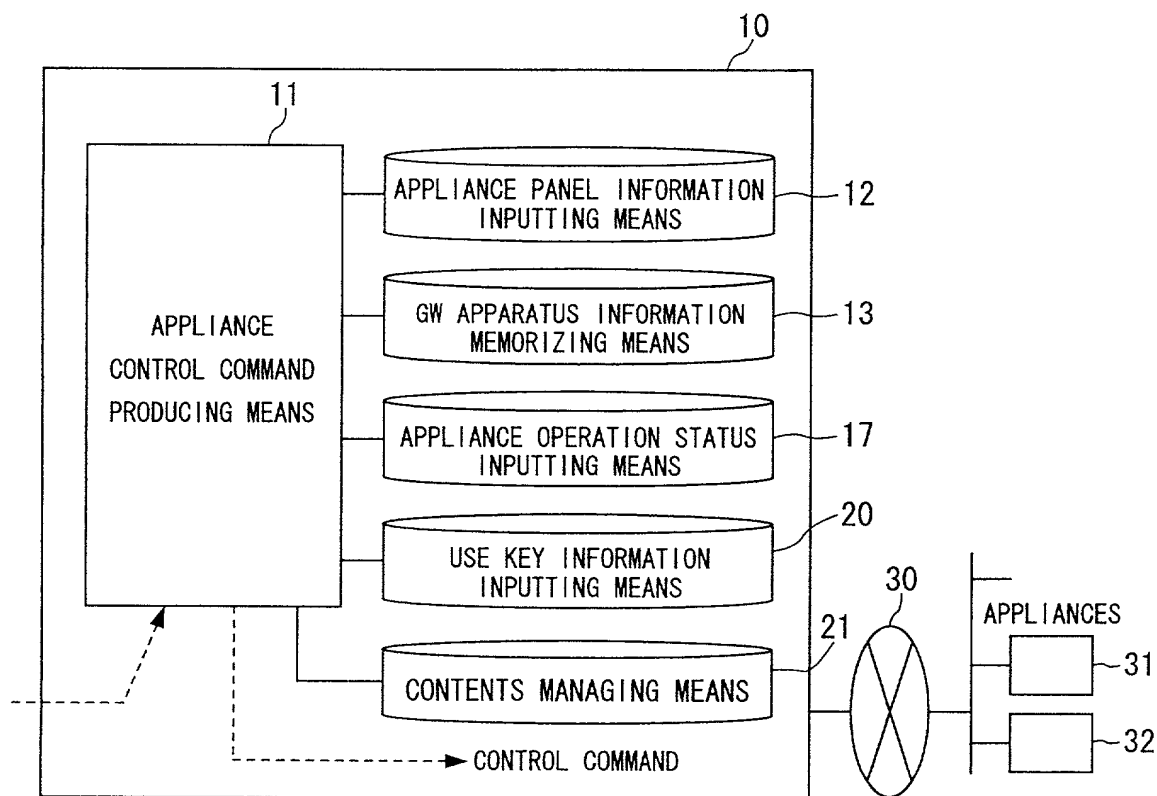


FIG. 56

CONTENTS ID	USE KEY NO.	ACCESS
a	5	—
b	6	VTR1
c	7	HD1
d	8	—
⋮	⋮	⋮

FIG. 57

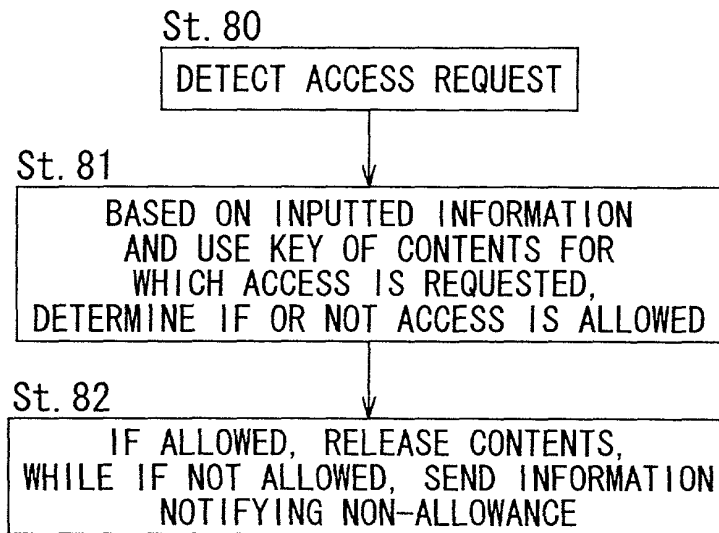


FIG. 58

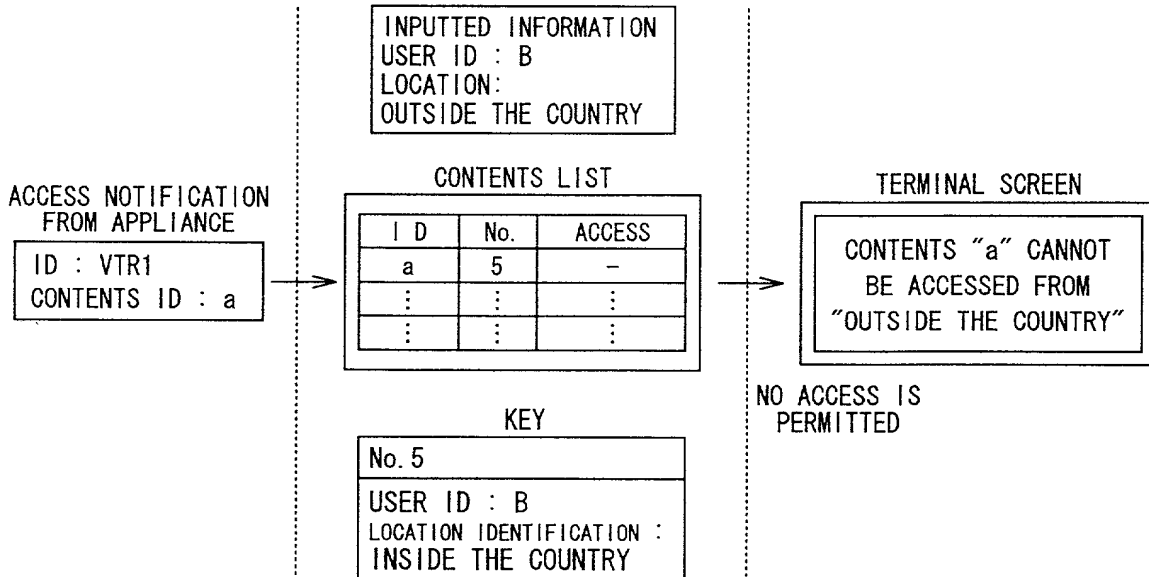


FIG. 59A

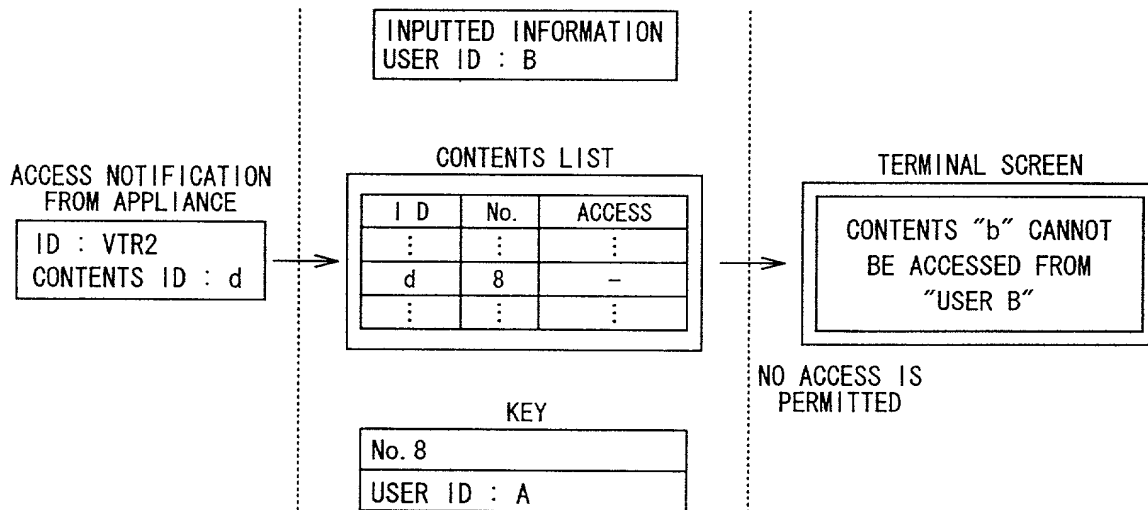


FIG. 59B

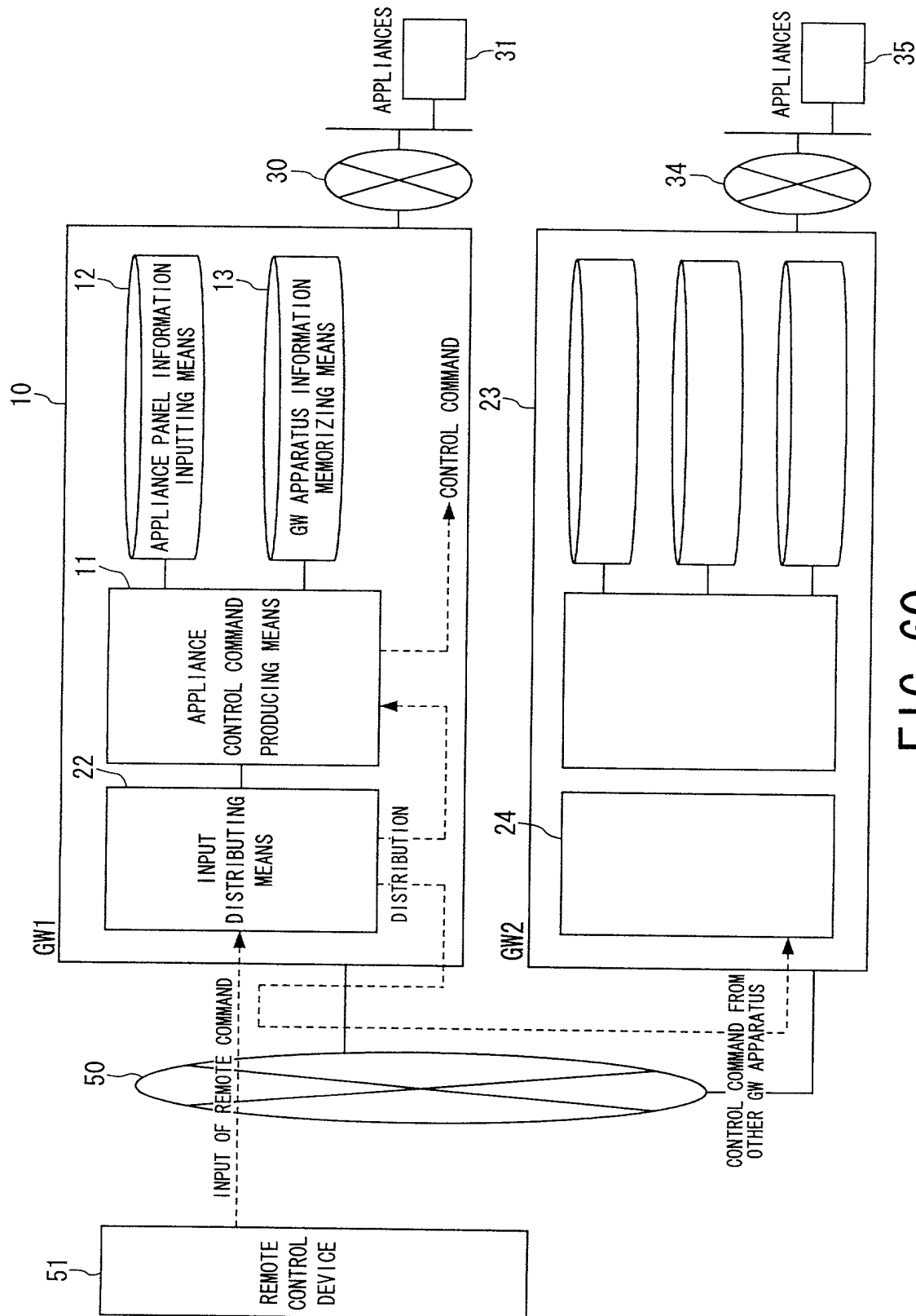


FIG. 60

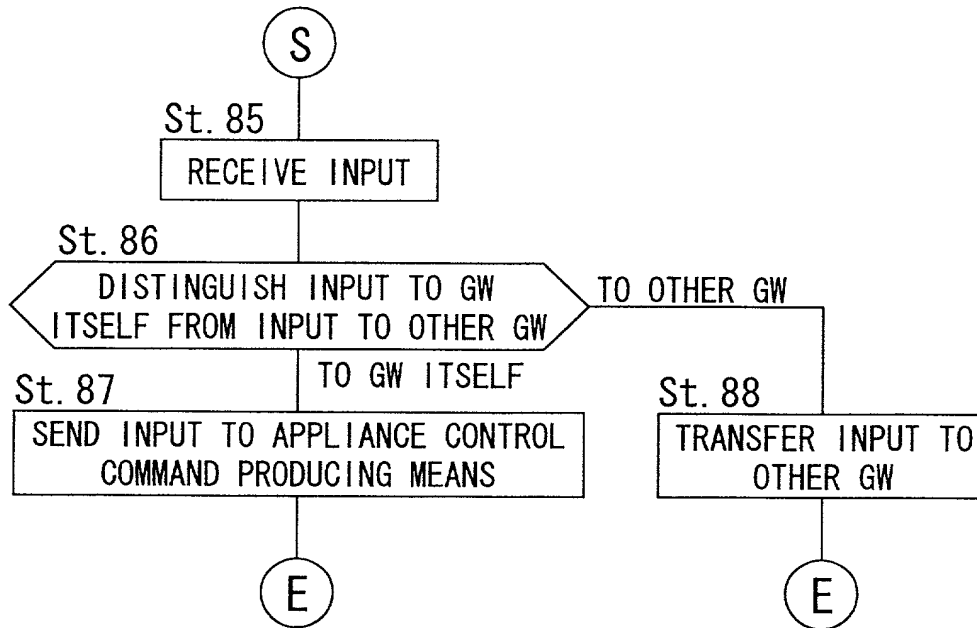


FIG. 61

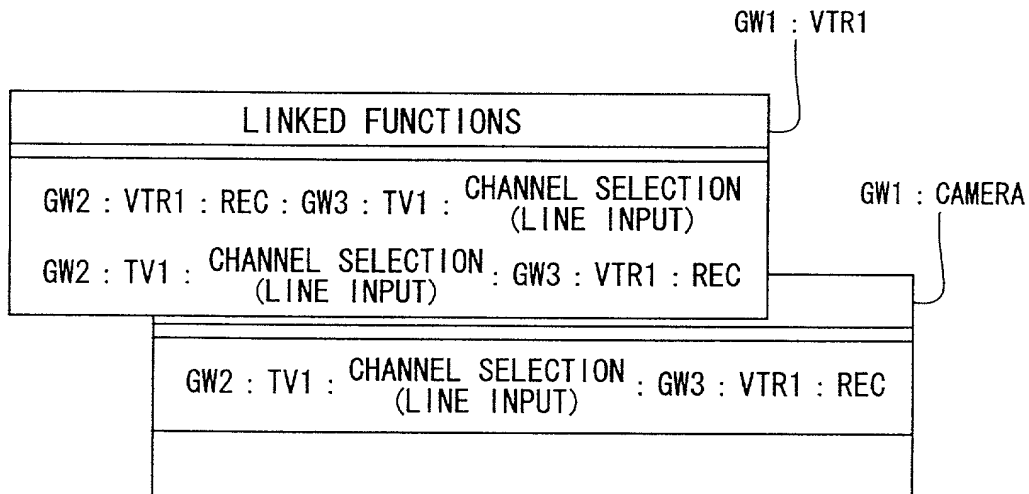


FIG. 62

FIG. 63A

SCREEN-DISPLAYED IMAGE FOR  
LINKED FUNCTIONS

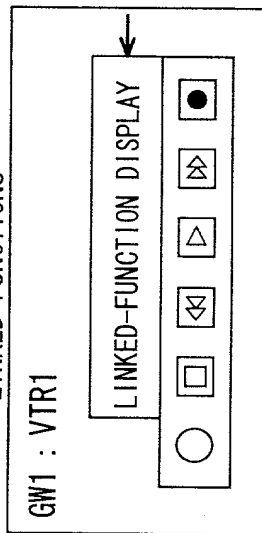


FIG. 63B

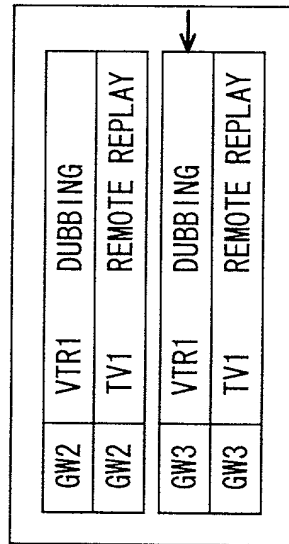
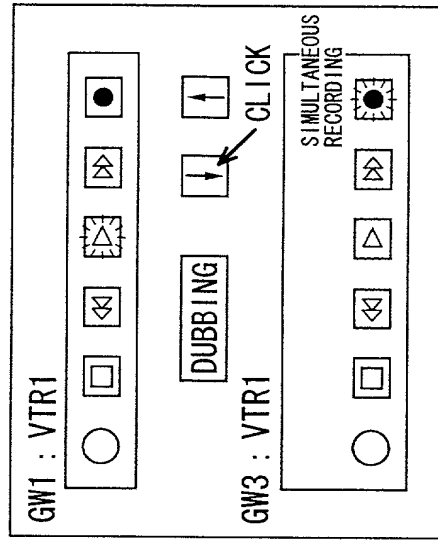


FIG. 63C



DUBBING : GW1 : GW1

GW1 : TERMINAL A : VTR1 : B1 : push :

GW3 : TERMINAL A : VTR1 : B4 : push :

FIG. 64

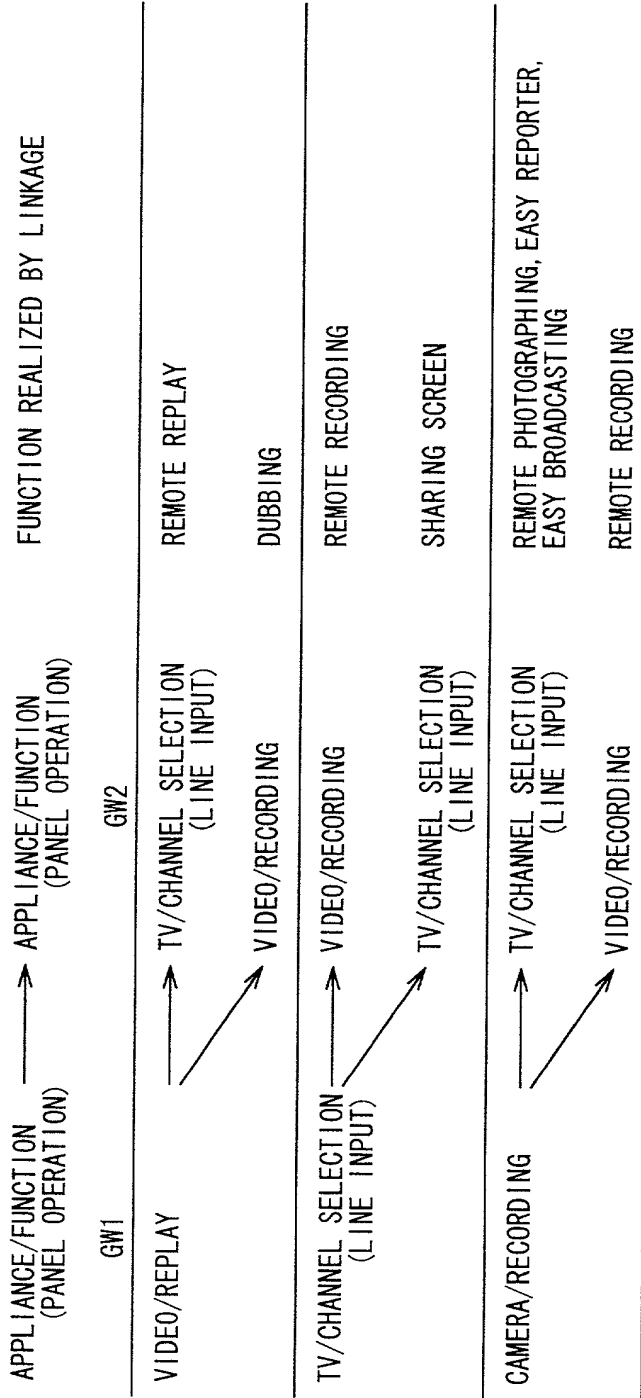


FIG. 65



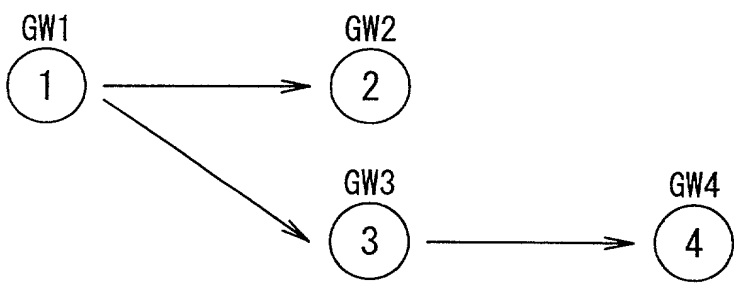


FIG. 66

DISTRIBUTION ROUTE INFORMATION
<u>DUBBING : GW1 : GW2</u>
<u>GW1 : TERMINAL A : VTR1 : B1 : push :</u>
<u>GW2 : TERMINAL A : VTR4 : B4 : push :</u>

FIG. 67

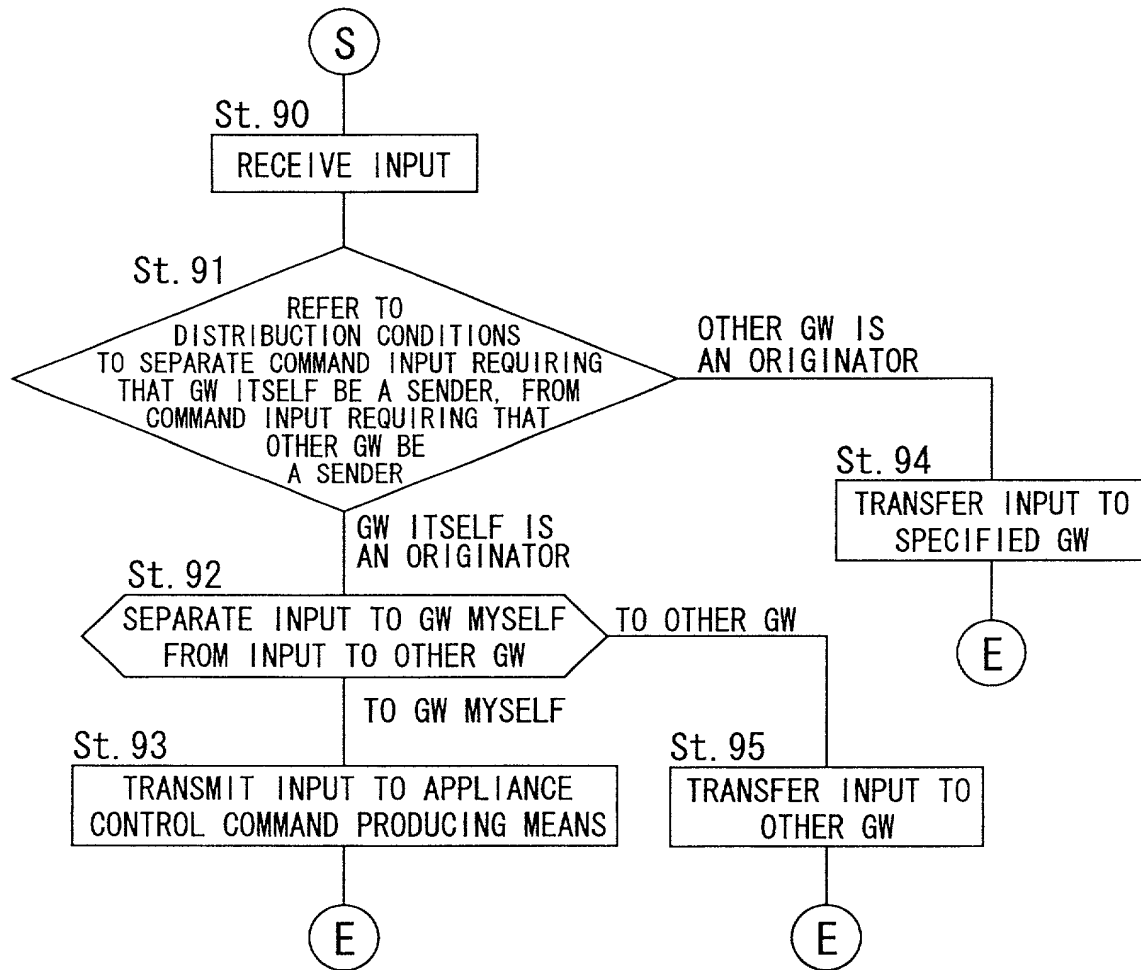


FIG. 68

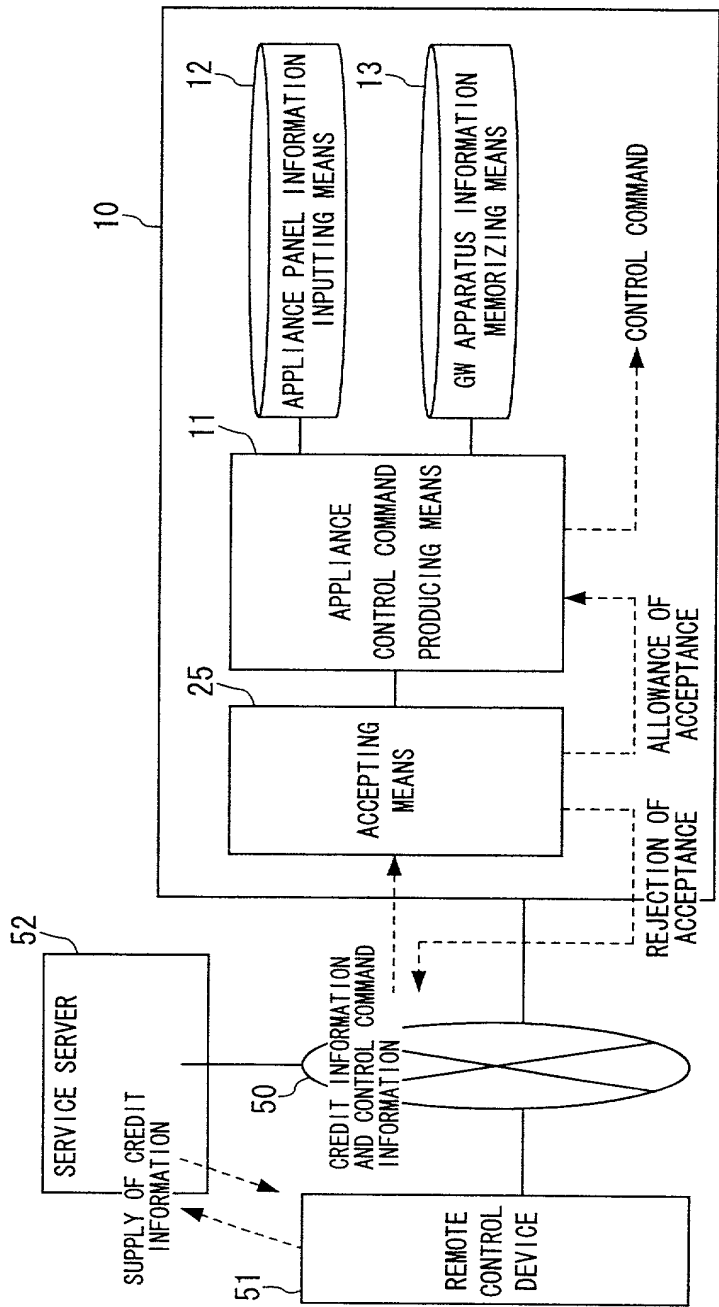


FIG. 69

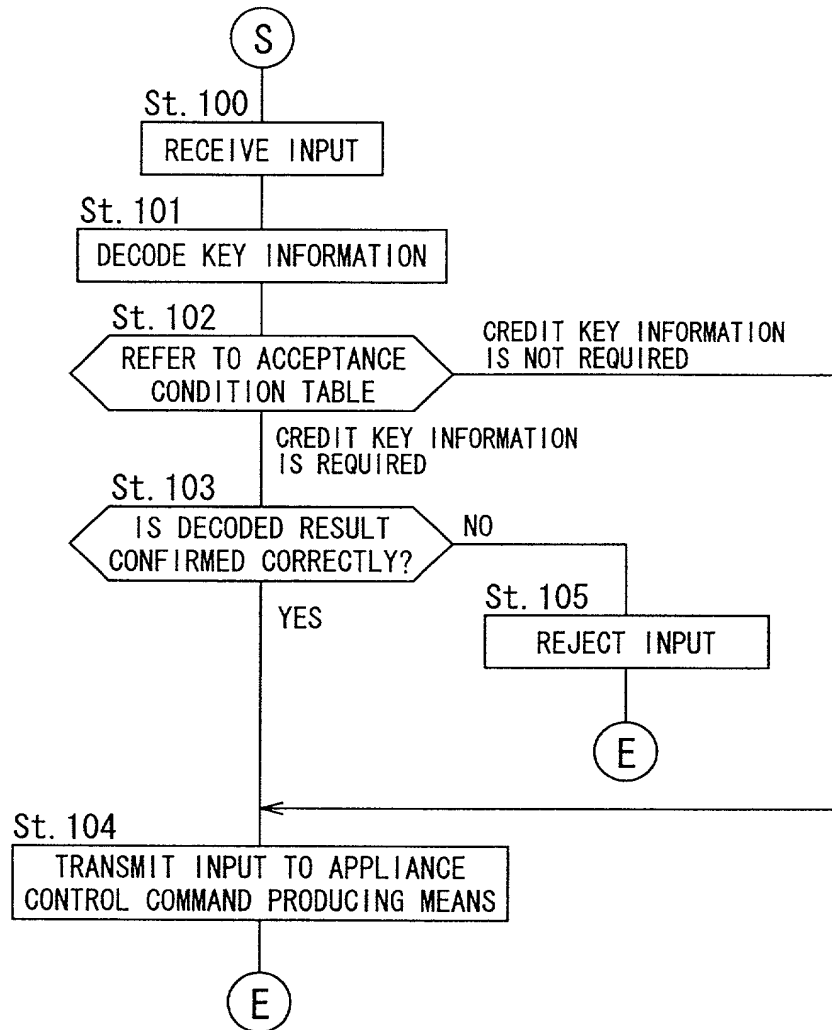


FIG. 70

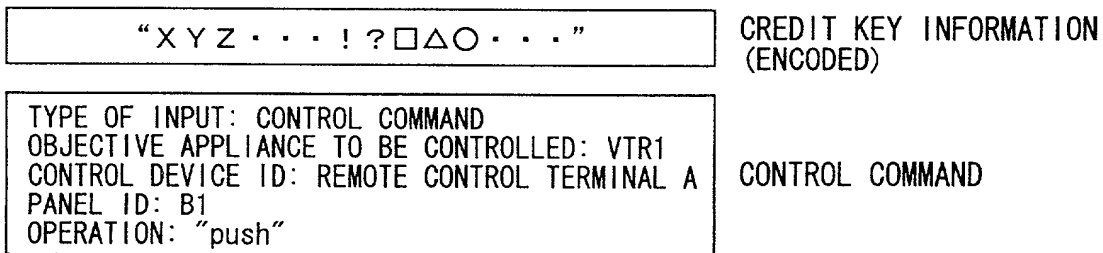


FIG. 71

ACCEPTANCE CONDITION
CREDIT KEY INFORMATION IS REQUIRED

FIG. 72A

SERVICE	ACCEPTANCE CONDITION
SERVICE 1	CREDIT KEY INFORMATION • REQUIRED
SERVICE 2	CREDIT KEY INFORMATION • NOT REQUIRED
SERVICE 3	CREDIT KEY INFORMATION • REQUIRED

FIG. 72B

TYPE OF INPUT	ACCEPTANCE CONDITION
ACQUISITION REQUEST FOR PANEL	"CREDIT KEY INFORMATION IS NOT REQUIRED"
CONTROL COMMAND	"CREDIT KEY INFORMATION IS REQUIRED"

FIG. 72C

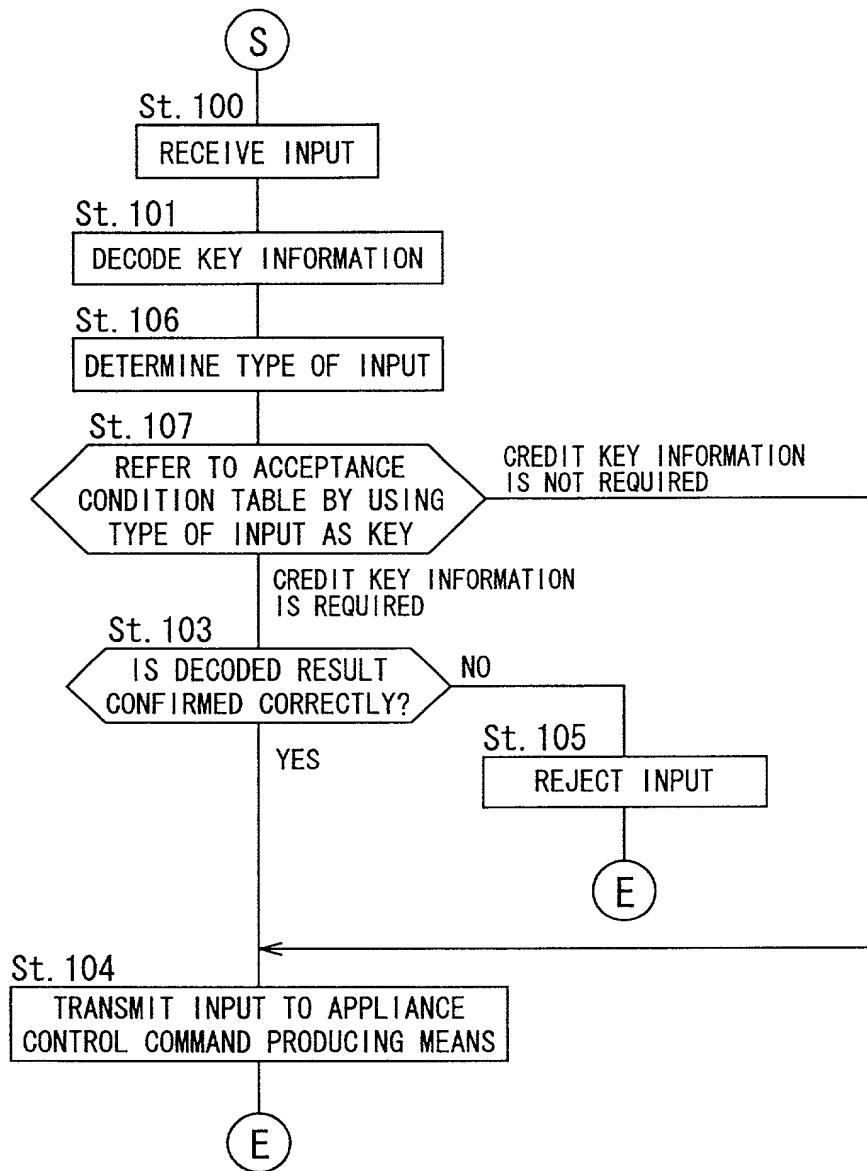


FIG. 73

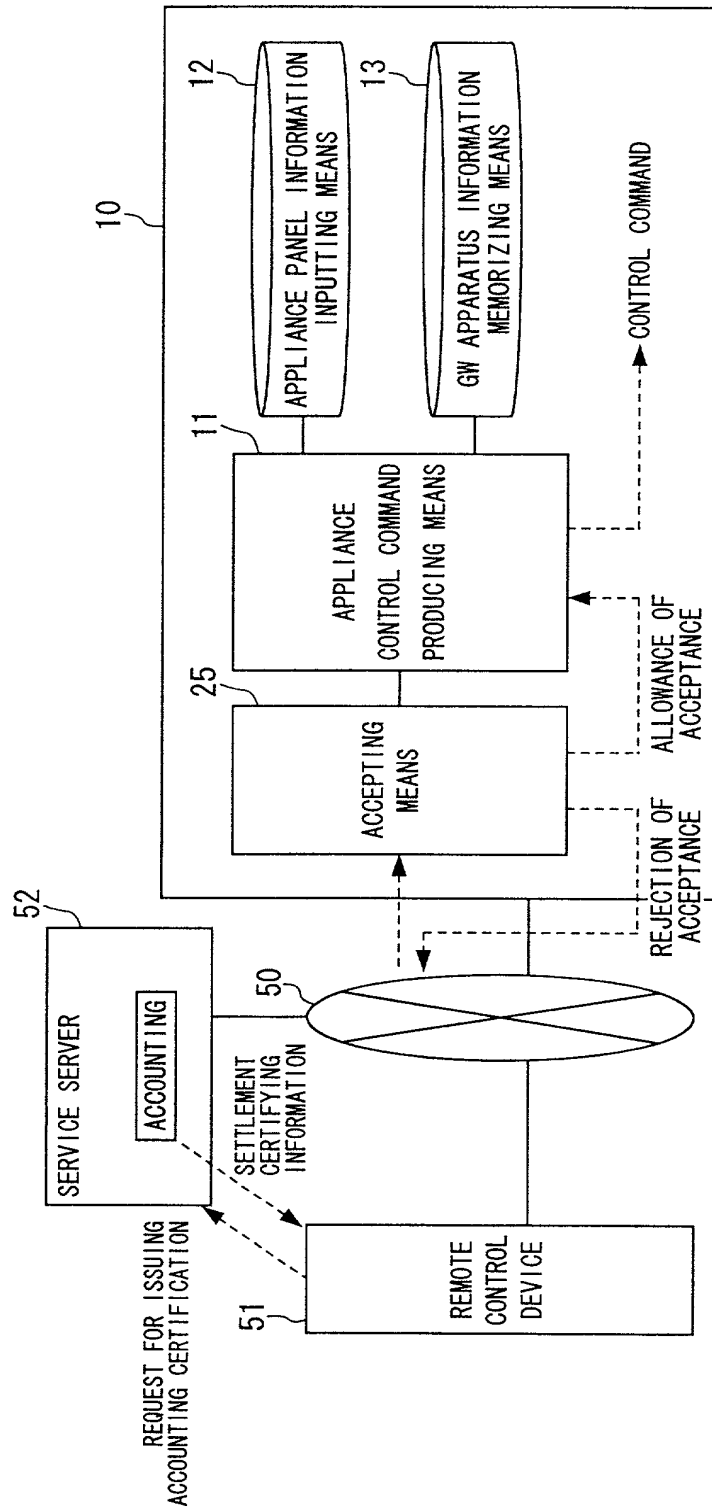


FIG. 74

TYPE OF INPUT	ACCEPTANCE CONDITION	KEY CONTENTS
ACQUISITION OF PANEL INFORMATION	"CREDIT KEY INFORMATION IS NOT REQUIRED"	-
CONTROL COMMAND	"CREDIT KEY INFORMATION IS REQUIRED"	"100 YEN HAS BEEN CHARGED"

FIG. 75

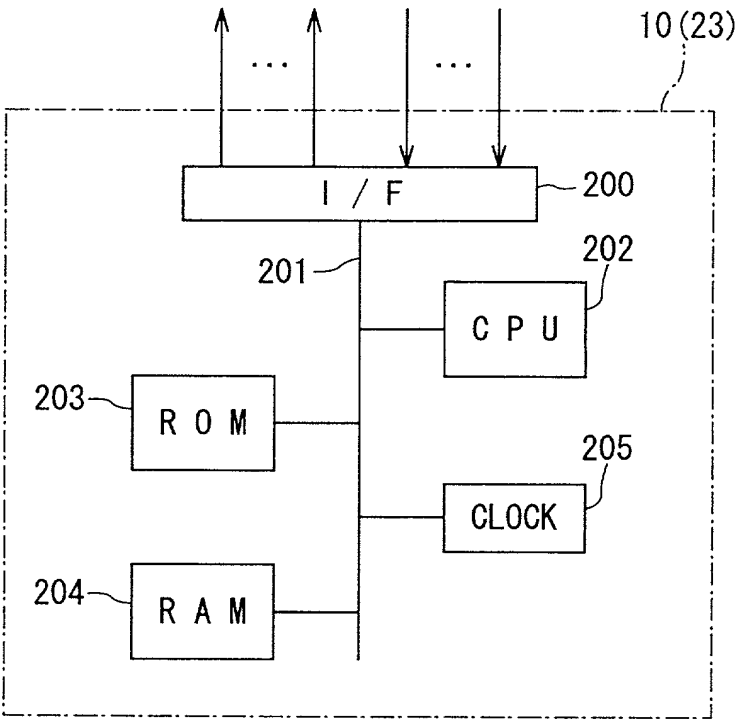


FIG. 76



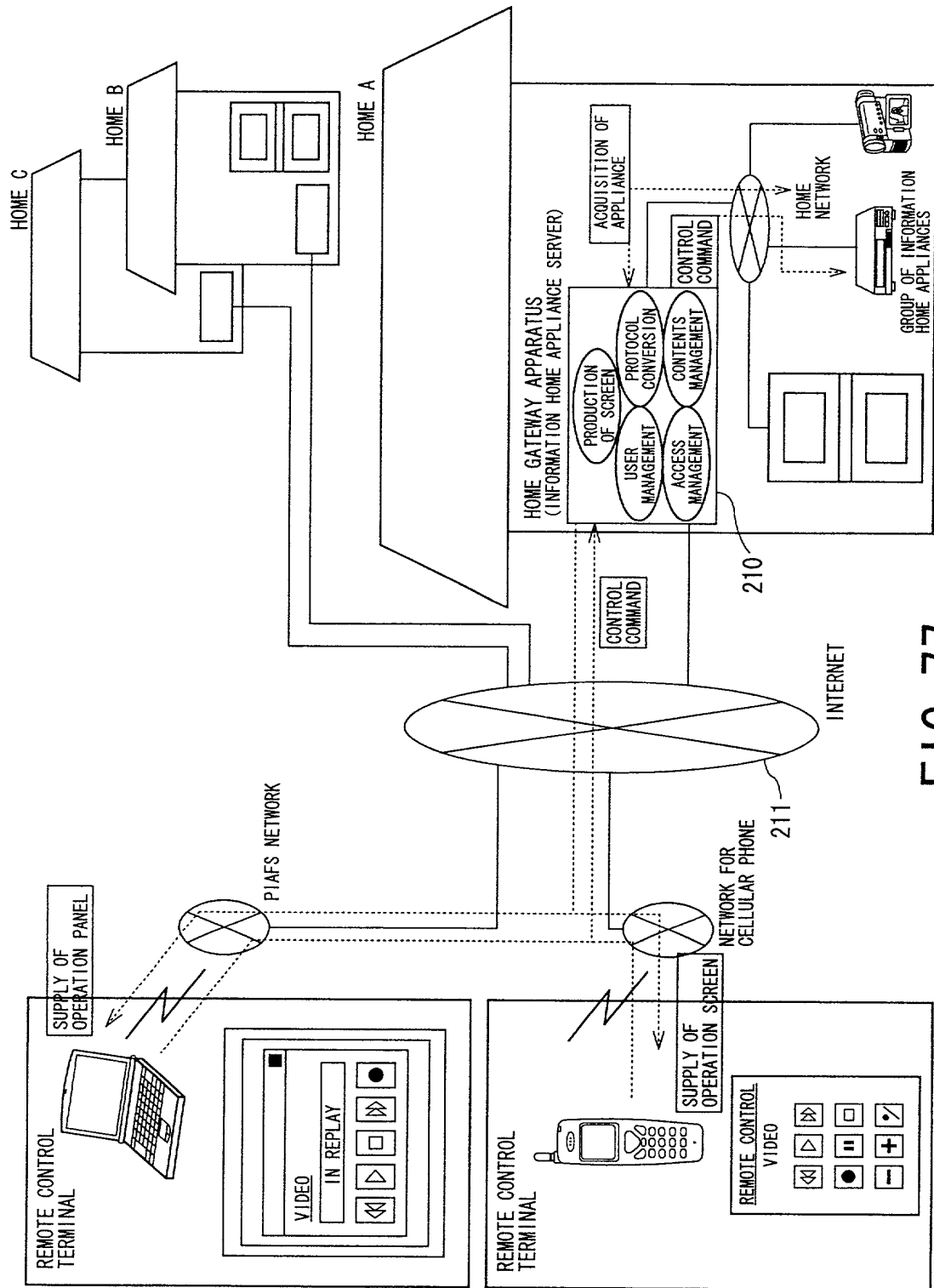


FIG. 77

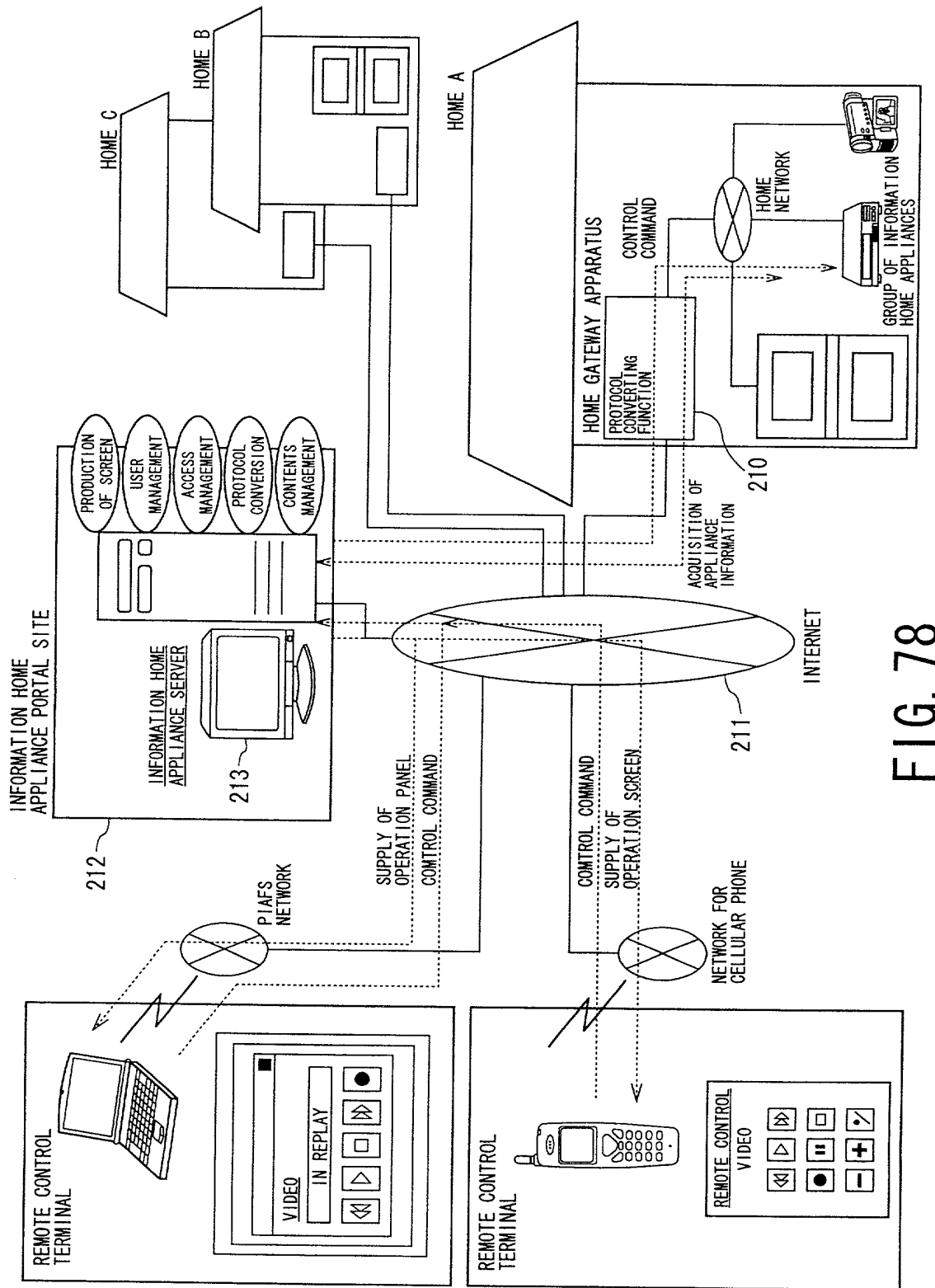


FIG. 78